Clinical Lectures
ON THE
COMMON FORMS OF PARALYSIS FROM BRAIN DISEASE.

Delivered at University College Hospital,

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LECTURE V.—PART I.

GENTLEMEN,—In continuation of the subject which occupied our attention at the close of the last lecture, I shall now proceed to give you a brief account of certain *Alterations in the Nutrition of Parts* which may be associated with hemiplegia, owing to their being indirectly due to the same cause. I shall refer to them in the time-order in which they are apt to show themselves.

There is one rare form of lesion that may begin to manifest itself within three or four days after the onset of the apoplectic attack with which the hemiplegia commences. This is an acute process of sloughing, which, quite independently of all external irritating influences, occasionally shows itself, not over the mid-sacral region as in spinal disease, but over the centre of the gluteal region on the paralysed side. I say the process may occur independently of all external irritating influences, because M. Charcot tells us he has seen it even where the most minute precautions have been taken with the view of preventing its occurrence—where the patient has from the first been made to lie on the non-paralysed side, and where all contact with urine has been most carefully avoided. It commences in the form of an erythematous patch, which appears in some cases as early as the second or third day, though generally somewhat later. The red patch is rapidly succeeded by the appearance of bullæ and hæmorrhagic spots, and these are followed by a sloughing of the skin which spreads concentrically. The patient frequently does not live long enough for the slough to separate; for this lesion is a complication seldom occurring except in cases which are about to prove rapidly fatal. At the same time, in these cases the liability to sloughing on the paralysed side under the influence of pressure is notably increased, so that such lesions are very apt to show themselves on the heel, on the inner side of the knee, and, in fact, wherever the skin is exposed to slight though continuous pressure.

Other lesions in internal organs are also occasionally produced at this early stage of the disease, though these, on account of their situation, are only recognisable in cases which terminate fatally. Amongst the principal of these lesions are to be included congestions and actual hæmorrhages into the substance of the lungs; though in addition there may be minute extravasations in or beneath the pleura, the endocardium, and the mucous membrane of the stomach, as well as into the substance of the suprarenal capsules and kidneys. Schiff and Brown-Séquard have often produced experimentally in some of the lower animals hyperæmic conditions or actual hæmorrhages in similar situations by traumatic irritation of the pons and middle cerebellar peduncles, and, to a less extent, by irritation of the optic thalami and corpora striata. Brown-Séquard concludes from his experimental observations on animals, and from the fact that these lesions are most readily produced by injuries of the pons Varolii, that they are probably brought about by sudden vaso-motor contractions leading to rupture of capillaries in the hæmorrhagic sites. He believes that this influence is exercised upon the lungs, not by the vagus, but through the medulla and upper part of the cord, and thence through the first thoracic ganglion of the sympathetic. The principal practical bearing of these experiments is to be found in the explanation which they afford of the congested and hæmorrhagic condition of the lungs, apt to be met with in many severe cases of cerebral apoplexy. They are, however, also interesting because they still further strengthen the conclusion supported by other evidence, that the pons Varolii is the principal centre of origin for vaso-motor nerves—not only for those supplying the limbs, but also for those of the thoracic and abdominal viscera.

We come now, gentlemen, to a consideration of the altered states of nutrition presented by the limbs themselves on the paralysed side. You must not, however, look upon the lesions to which I shall refer as universal, or even as common occurrences. They are met with more or less rarely, though it is desirable that you should understand their nature in the cases in which they do occur. The first, in order of time, is a subacute inflammation of some of the joints on the paralysed side of the body, which may appear either in the leg or in the arm; most frequently in the latter. Dr. Scott Alison originally called attention to this lesion, though it has been subsequently investigated by Brown-Séquard and Charcot. Whilst this articular inflammation may show itself as early as the fifteenth day, it more often appears in from three to six weeks after the onset of the hemiplegia, or perhaps even later still. The joints become red, swollen, and painful when moved; and the sheaths of the tendons near the joints are also sometimes affected. The condition much resembles a rheumatic articular inflammation, only it is found to be limited to some one or more of the joints of the paralysed side, and it comes on at a comparatively definite period after the commencement of the hemiplegic attack. On post-mortem examination of the affected joints, M. Charcot has found all the characteristics of a subacute synovitis. Very frequently, however, the joint affection after a time gradually subsides; and in some cases it may, from the first, be so slight as only to reveal itself by obscure pains when the limb is moved.

In such cases as I have just been referring to, tenderness sometimes exists in different parts of the arm or of the leg, instead of being limited to the joints; and where this occurs, Cornil, Charcot, and others have found the tenderness more especially marked along the course of the principal nerves. They have ascertained that this pain is occasioned by a sub-inflammatory hypertrophy of the nerves and of their sheaths. The nerve-trunks are found to be notably enlarged and much more vascular than natural, the enlargement being due to an overgrowth of the connective-tissue elements entering into their composition. In cases where "pains" are complained of in the paralysed limbs, they are most frequently traceable to the existence of this condition of the nerves, either alone or in combination with the joint affection. But in some rare cases in which pains are felt, a tenderness of the limb generally may be detected—that is, a tenderness not specially limited to the joints and large nerves—as in the case of the woman suffering from left hemiplegia who is now in our wards.

You must understand that these conditions which I have just been describing often supervene with, and indeed constitute part of, the state known as "late rigidity." We only have to superadd to the changes already referred to, certain others taking place in the muscles of the limb affected, in order to complete the state. The nature of these latter changes, and the cause of the set as a whole, I shall now endeavour briefly to indicate.

It occasionally happens, as in the woman to whom I have just alluded, that an early and altogether special wasting takes place in the muscles of one or other limb within a few weeks from the onset of the paralysis. This event is, however, very rare, and only a few cases of the kind are on record. I can now only refer to two—one by the late Dr. Todd, and one by M. Charcot. In our case the patient is forty-six years of age. Whilst engaged in household work she dropped down insensible, and did not recover consciousness for two days and a half, when it was found that she was completely paralysed in the left arm and leg. On her admission into this hospital nine weeks afterwards, there was scarcely any trace of facial paralysis, and no appreciable diminution of sensibility, though there was still complete loss of power in the left arm and leg. The temperature of the paralysed limbs was ½° higher than that of the non-paralysed limbs. Some pains and tenderness were already felt in the left upper extremity, and its muscles were very decidedly wasted around the shoulder, in the arm and in the forearm. The muscles of the left leg were, however, not at all wasted, and neither were pains nor tender-

ness felt in any part of the limb. The muscles of each extremity responded a trifle more readily to faradisation than those of the opposite or non-paralysed side. Such was her state on admission nearly two months ago. Since then she has regained power considerably in the left leg, and is now able to flex and extend it both from the hip- and the knee-joints. The condition of the arm, however, has become worse. Whilst she has not regained the slightest power over it, the wasting has become even more marked and the whole limb more painful. Pain is felt when we attempt to move it in any way, and there is a distinct tenderness in almost all parts of the limb, not specially confined to the joints or course of the large nerves.

Now this is a condition of great importance, because, owing to its rarity, it fixes our attention, and compels us to inquire as to its cause and as to its relations with other trophic lesions in the paralysed limbs. You may look upon it as a fact firmly established in pathology that lesions of the cerebral hemispheres do not of themselves produce an early wasting of muscles in the paralysed limbs—that is, no wasting which may not be explained as a result of the mere disuse of the limb. Hundreds of cases of brain lesion attest the truth of this view. So that when we meet with apparent exceptions to the rule, we are bound to search for some special cause. Now it has been known for the last twenty years that cerebral lesions damaging the motor tract on one side—either in the corpus striatum, the crus, or the pons Varolii—give rise to a well-marked "secondary degeneration" in the spinal cord, which is situated in the lateral column on the side opposite to that in which the brain lesion occurs. I cannot now explain fully what we know concerning these very interesting secondary degenerations of the cord. I will merely state that the mode of production of similar lesions in peripheral nerves was first explained by the late Dr. Waller, who ascertained that when a motor nerve was cut across, the part below the section, being severed from its central ganglionic connexions, underwent a rapid process of fatty degeneration throughout its whole length, so that the white substance of the nerve became completely broken up into fatty globules and granules in the course of from five to eight days. It is a process essentially similar which is initiated when the motor tract is damaged in the corpus striatum or in lower parts of the brain. The inferior portions of this tract then become rapidly degenerated throughout their whole extent. The fatty change is also soon associated with an overgrowth of the neuroglia or interstitial tissue throughout the same tract of cerebral and spinal cord substance. Thus a band-like tract of sclerosis is ultimately produced, which may be traced through the crus, through the pons and anterior pyramid of the same side, and thence into the opposite lateral column of the spinal cord. After a time the tissues in this area of degeneration with fibroid overgrowth diminish in bulk, according to their custom, and then an atrophy or wasting becomes obvious to the naked eye along the whole length of the tract already mentioned. This is the condition so frequently met with in persons dying some months or years after a severe attack of hemiplegia. Now the process of fibroid overgrowth, thus initiated, may remain strictly limited in its seat; but in some cases it spreads, as such processes are apt to do, to contiguous healthy regions. In view of this possibility, therefore, you must recollect that the inner and anterior portion of the degenerated tract of spinal cord tissue lies, throughout its whole extent, close along the side of the corresponding anterior grey cornu. We have therefore only to imagine this process of fibroid overgrowth extending inwards so as to involve the anterior horn of grey matter (either in the cervical or in the lumbar region, or in both) to account for certain nutritive changes occurring in one or both limbs of hemiplegic patients. An atrophy of the great ganglion cells in the anterior cornu would give us the pathological condition pertaining to, and therefore the *rationale* of, the occurrence of rapid muscular wasting.

This was the explanation I offered to you of the speedy atrophy of the arm muscles in the case of the woman now under our care. But I have since ascertained that such a mode of causation has been actually verified post mortem in one very important case by M. Charcot, to whom we are indebted for an increase in our knowledge of the pathology of nervous affections in so many other directions. His case may be briefly recorded as follows:—A woman, about seventy years of age, was suddenly paralysed on the left side by an extravasation of blood into the midst of the right cerebral hemisphere. The limbs on the paralysed side very soon became rigid; and in rather less than two months from the commencement of the attack the muscles of both limbs began to waste. This wasting progressed rapidly, and was associated with a notable diminution in the electric irritability of the muscles. When the atrophy of the muscles had become well marked, the skin of the paralysed limbs presented bullæ here and there, and these soon gave place to wounds in parts which were subjected even to slight pressure. The patient having died shortly afterwards, sections of the hardened cord were made, which showed the usual band of sclerosis, in the left lateral column, though the band had in this case, to use M. Charcot's expression, "extended to the anterior cornu of grey matter on the corresponding side, and had there produced an atrophy of a certain number of the motor ganglion cells."

Now in this case the extension of the morbid process was rapid and probably well marked; but in the patient now under our own observation there is reason to expect that the extension of the process of sclerosis to the grey matter is less marked, and that it exists only in the cervical region of the cord—or at all events does not affect the lumbar region, seeing that the nutrition of the leg is not at all interfered with. In other cases, however, an extension of the fibroid overgrowth from the lateral column to the contiguous grey matter may take place in the lumbar region more especially, and the process may be so far moderate in extent as not to produce any very decided muscular wasting, though the degeneration of the grey matter is sufficient to prevent a return of motor power to the leg. See, then, how we have traced a very probable relationship between our case of hemiplegia now in the ward with wasting of the arm, and those other cases of delayed recovery of power in the leg of which I have already spoken to you, and to the consideration of which I promised to return. You will recollect my telling you that, according to Trousseau, pains in the limbs are of very frequent occurrence in these cases, and you will now understand how such pains may be due to sub-inflammatory changes in the nerves or in the joints, such as would be particularly liable to occur if the prolonged paralysis of the leg were due to an extension to the grey matter of the secondary changes in the spinal cord. For, as I should have mentioned to you before, M. Charcot has also ascertained that there is a close, and probably a causal relationship between these degenerative changes in the anterior horns of the grey matter and those pathological changes in the articulations of the same side to which I have already referred.

So that there seems good reason for the belief that the nutritive changes generally, which go with and in great part make up the condition known as "late rigidity," are much more likely to be due to irritative influences emanating directly from the spinal cord, and occasioned by extensions of the secondary degenerations there existing, than to irritative influences emanating directly from the cerebrum itself, as Dr. Todd supposed.

I have only one other suggestion to make concerning the effects of these secondary changes in the spinal cord, and it is this:—Occasionally, where the leg does not recover power as it should do in a case of hemiplegia, the other leg may after a time also become weak, so that a paraplegic condition is slowly brought about without any obvious cause. It develops as the previous hemiplegic condition disappears, and after a time comes to a standstill. We have lately had a case of this kind in the wards; and though such a clinical sequence may be explained by a slow spread of fibroid degenerative changes into the grey matter on both sides, from its original focus in the lateral column, I cannot at present support this view by post-mortem evidence. The cases themselves are exceedingly rare.

There is another abnormal condition of the limbs occasionally met with, to which I ought to call your attention. It is almost always erroneously spoken of as one of "atrophy," whereas in reality it is a clear case of *arrested* or *retarded growth*. This condition is frequently seen in cases where a lesion of the brain of a severe nature, producing hemiplegia, has occurred at any period between that of birth and the third or fourth year. In such cases the arm and leg, or the arm only, on the paralysed side, grow much more slowly than on the sound side, so that when the period of growth ceases, the paralysed limbs remain per-

manently smaller than those of the opposite side. The arm is more frequently affected than the leg, and when this condition is well marked in it there is generally also some amount of rigidity about the elbow- and wrist-joints. In about fifteen cases which have been under my care, where this diminished size of the limbs has been met with, I have found that the retarded growth has almost always been most marked in the distal portions of the limb. Thus, whilst the length of the humerus or of the femur has been equal on the two sides of the body, the hand and foot on the paralysed side have been notably smaller, and the forearm or leg bones of the same side have been shorter than those of the sound limbs. Occasionally, however, the proximal portions of the limb have also been smaller than natural. In these cases, where post-mortem examinations have been made, actual loss of substance, or marked atrophy in some part of the cerebral hemisphere, has generally been met with.

You must not suppose that this latter condition of the limb is met with only as a sequence of a hemiplegic attack occurring in infancy. A similar retardation of growth, with diminished size of one or more limbs, may be also due to a previous attack of the so-called "infantile paralysis." Here we may have one or both legs affected, but only very rarely one leg and one arm on the same side. The muscles, too, in these cases are actually wasted, and have often quite lost their irritability under the influence of faradisation, or have lost it to a much greater extent than when we have to deal with an arrested growth from brain disease with hemiplegia.

I ought perhaps also to call your attention to the fact that even in ordinary cases of hemiplegia, as Dr. Weir Mitchell has lately pointed out, the nails of the fingers on the paralysed side either cease to grow, or increase at a much slower rate than those of the sound side.

Clinical Lectures
ON
VARIETIES OF PSOAS ABSCESS,
WITH REMARKS ON DIAGNOSIS AND TREATMENT.

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LECTURE I.—PART I.

BY psoas abscess I understand an abscess which is found inside the sheath or part of the sheath of the psoas muscle. If confined to that sheath, it will correspond exactly to the figure of the muscle, and form an oblong or spindle-shaped and tapering tumour, reaching from the diaphragm to Poupart's ligament, and in many cases prolonged into the thigh. In some instances the abscess also fills the sheath of the iliacus, and it ought then to be called an ilio-psoas abscess. If solely developed within the sheath of the iliacus, it would then, and then only, be entitled to the name of iliac abscess. Under the terms iliac, psoas, and ilio-psoas abscess, I would not include, as is sometimes done abscesses formed over the muscles, but not within their fascial investments.

At post-mortem examinations, when we have an opportunity of seeing these abscesses early, and before the discharge of their contents, we may observe that the fascial sheaths under which they lie are distended and clearly defined by the purulent fluid; but when the case has been of long duration, and the matter has been constantly draining away from openings in or near the groin, we may merely find a long sinus or sinuses traversing and tunneling the atrophied muscle from the vertebræ to the lower apertures of the fistulous tracks. Should the abscess originally existing have undergone partial absorption and alteration, we may discover masses of cheesy material, and in some cases of rarer occurrence adipocere. Mr. Corner, of Poplar, found adipocere in the sheath of the psoas muscle in a case ending fatally from some other disease having no connexion with the original psoas abscess; and Mr. Bryant, who for some time regularly examined the psoas at the post-mortem examinations at Guy's Hospital, found on several occasions the degenerated cheesy material indicative of a psoas abscess having existed at some previous period of life.

The mode of development and the ordinary phenomena of psoas abscess are very familiar to surgeons. In the majority of cases it arises from caries of the lower dorsal or lumbar vertebræ, or disease of the intervertebral discs. When it is caused by disintegration of the bodies of the dorsal vertebræ and the intervening fibro-cartilages, a large abscess is first formed in front of the excavated spine, and as the abscess increases in size it gravitates downwards, and finds its way under the ligamentum arcuatum internum into the substance of the psoas muscle. It then gradually works its way downwards to Poupart's ligament, generally expanding outwardly towards the crest of the ilium, and filling the sheath of the iliacus. The next step in its progress is its further descent into the thigh. Mr. Shaw, who has described the mode of development very fully, states that the opening through which the abscess descends is "invariably at one place—namely, behind Poupart's ligament, between the united tendons of the iliacus internus and psoas muscles and the anterior inferior spinous process of the ilium. The situation corresponds with the point of junction of the outer with the middle third of Poupart's ligament." As the abscess escapes from the abdomen it becomes released from compression, and enlarges in Scarpa's triangle. It then generally passes downwards and inwards along the sartorius for a variable distance. "Sometimes, however, soon after its appearance in the groin, it turns sharply inwards to occupy a space over the adductor muscles. In a comparatively rare set of cases it bends outwards. Occasionally the abscess divides at the groin, one portion going inwardly and the other outwardly."* The opening between the abdominal and femoral portions of the abscess is called by Mr. Shaw the neck of the abscess, after the analogy of hernia, and this, according to him, is always on the outer side of the femoral artery. But the statements of other writers would lead us to infer that the abscess does not always follow the route which he has described, but sometimes passes behind Poupart's ligament at a point internal to the junction of the iliacus and psoas. Nor is there any reason suggested by a consideration of the anatomy of the muscles and their fascial sheath for an abscess inside this sheath "invariably" to pass into the thigh at the one spot mentioned by Mr. Shaw. Does it not and may it not sometimes descend behind, and even a little internal, to the femoral artery? However this question may be answered, we find as a matter of fact that the abscess below Poupart's ligament occupies in different cases different relations to the femoral artery. In one case it may be in front, in another on the outer side, in another on the inner side, in a fourth on both sides and in front, and in a fifth behind it and lifting it up, so that its pulsations may be felt, and even seen, immediately beneath the superficial coverings of the thigh. Such a case as the last occurred to Dupuytren, who supposed for a moment that he had to deal with an aneurism, but soon discovered, on examination, that the pulsation was confined to a line along the tumour formed by the abscess, and that the artery had merely been pushed forward by the accumulation of pus behind its sheath.

In cases of psoas abscesses dependent on spinal disease, the matter may accumulate to such an extent that it bursts through the fascia covering the psoas muscle, and travels into other regions. For example, it may leave the psoas muscle in the interval between the last rib and the crest of the ilium, passing to the outer edge of the quadratus lumborum and sacro-lumbalis muscles, to project posteriorly in the lumbar region, or to descend over the crest of the ilium and present in the buttock. This course is considered more likely to be pursued in children, on account of the inferior elevation of the crests of the ilia; and the same cause ought to make it more frequent in women than in men, as the alæ of the ilia do not rise so high in relation to the spine as in the opposite sex. Sir Benjamin Brodie has related a case in which an abscess communicating with the carious surfaces of the seventh and tenth dorsal vertebræ extended

* System of Surgery, vol. iv., pp. 120-121.

downwards, first in the course of the psoas muscle, then backwards on the *inner* edge of the quadratus lumborum, and thence to the nates, where it had burst during life.* From a careful perusal of the whole of Sir B. Brodie's observations, I cannot but think that there is a mistake in the passage, and that it was on the *outer* edge and not on the *inner* edge of the quadratus lumborum that the abscess was deflected. In making this remark I do not wish to set any limits to nature, but merely to express the opinion that it is far more likely that an abscess would be directed to the outer than to the inner edge of the quadratus. Perforation of the quadratus by an abscess has been recorded, and if this has occurred, there is no reason why an abscess should not find its way backwards on the inner edge of the muscle.

A psoas abscess might leave the psoas muscle, and, passing forwards, find its way along any of the planes of areolar tissue in the anterior abdominal wall; it might travel between the transversalis fascia and the transversalis muscle, or, perforating the transversalis fascia, run along between it and the peritoneum. It has been observed to open outwardly through the abdominal muscles.

Psoas abscesses may bifurcate, one division proceeding to the loin and the other to the groin. Or they may make their way down the inguinal canal, simulating a reducible hernia. Descending from the psoas, they may pass along the sacrum by the side of the rectum, and present in the perineum in the neighbourhood of the anus, or leave the pelvis by the sciatic notch, and appear in the buttock underneath the gluteus maximus, or, gravitating still lower along the course of the great sciatic nerve, reach the back of the thigh, and even the popliteal space. "Occasionally," says Sir B. Brodie, "it reaches the back of the thigh in another way. I have known an abscess to have descended from the loins, and presented itself as a tumour in the groin. Suddenly the tumour has disappeared, and the patient has been led to entertain hopes of a speedy recovery. But these have been soon disappointed in consequence of the discovery of a large collection of matter in the posterior part of the limb behind the little trochanter of the femur. In a case of this kind in which I had the opportunity of examining the morbid appearances after death, I found that the abscess had taken the course of the common tendon of the psoas magnus and iliacus internus muscles to their insertion into the bone, afterwards extending further backwards below the inferior edge of the quadratus femoris."† Sir B. Brodie goes on to say: "I may take this opportunity of observing that it is by no means uncommon, whatever part of the spine may be the seat of caries, to find an abscess thus altering its course, disappearing in one place, and some time afterwards appearing in another."‡

The passage of the abscess backwards to the posterior aspect of the thigh is most likely to occur in cases of caries of the lumbar vertebræ in which the matter forms and descends *behind* the psoas muscle. These conditions were found in Case 70 reported in Sir Benjamin Brodie's work on the Joints. In other cases the abscess pursues a *double* course, part of it lying in front of the muscle and part behind it. In a third set of cases the course may be *multiple*.§

If there is an abscess on each side, it is not usual for both to reach the groin; the second generally proceeds but part of the way thither. In a case of Pott's curvature of old standing, under my care at the London Hospital, open sinuses existed on both sides close to Poupart's ligament, and maintained a constant discharge of pus.

When a psoas abscess attains a great size, it may be *multilocular*. Mr. Erichsen has recorded a remarkable case, in which "the abscess extended from the lumbar vertebræ through the iliac fossa, down the thigh, the ham, and the leg, until at last it was opened by the side of the tendo Achillis, forming five or six distinct cysts, communicating with one another by contracted channels."*

Psoas abscesses may be attended with several complications. They may form an opening into the rectum or some adjoining portion of the intestinal tube, or become connected with the urinary bladder. Mr. Shaw notices the case of "a girl, thirteen years of age, who had acute angular deformity at the centre of the dorsal vertebræ, and a psoas abscess, of several months' duration, on the left side. The abscess reached down to the knee, the external opening being over the inner condyle of the femur. As a proof that the abscess admitted some of the contents of the intestines into the interior, the patient, during the writer's visit, picked from the orifice the skins of one or two peas and a bit of undressed stalk of greens which she had been lately eating."† Mr. Holmes relates a case of right ilio-psoas abscess which formed a communication, not only with the large intestine, but also, by an extension of the same opening, with the cavity of the peritoneum, and thus led to the sudden death of the patient.‡ An equally dangerous complication is a communication with a large bloodvessel. A lad was admitted into St. Bartholomew's Hospital, under the care of Mr. Savory, for a large psoas abscess. He died in a few days with symptoms of collapse. At the post-mortem examination the abscess was found to have opened the abdominal aorta. There was an opening in the wall of the aorta capable of admitting the tip of the forefinger. Around the opening, and projecting into the abscess cavity, was a mass of laminated coagulated fibrine, about the size of a small orange.§ A large vein, and especially the vena cava, might be opened in a similar manner; but I am not acquainted with any case of the kind. Caries and necrosis of the vertebræ and the pelvic bones may be the result of the long-continued presence of matter within the sheath of the psoas muscle, or the muscle itself. Destruction of the sacro-iliac joint may be occasioned by it. Below Poupart's ligament a communication may form with the hip-joint; and I am not aware that recovery has been recorded after the occurrence of this untoward complication. Anatomical considerations would lead us to expect that a psoas abscess is most likely to communicate with the hip-joint if it passes underneath the substance of the muscle. In that position it would come in contact with the bursa which lies between the muscle and the capsule of the joint, and sometimes is merely a prolongation of the synovial membrane of the joint. The abscess might readily pass through the thin walls of the bursa, or find its way into the joint by perforating the thin part of the capsule covered by the psoas.

At the upper end of the abscess a communication may be formed with the pleura, or it may discharge its contents into the lungs, having entered in a similar way to an abscess of the liver thus terminating. Not only pus but pieces of dead bone have traversed the communicating aperture and been expectorated. Fragments of bone will also work their way from the orifices of spinal abscesses opening in other positions. Mr. Bryant has "seen a mass the size of a nut come away from a lumbar abscess, and a piece of bone, clearly spinal, discharged from an abscess of the thigh opening above the knee-joint." ‖

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* Diseases of the Joints, Case 67, p. 307.

† Op. cit., pp. 334 and 335. The case referred to in the passage quoted in the text appears to be identical with Case 60, reported in Sir B. Brodie's work on the Joints. The patient had been ordered to remain constantly in the horizontal position, and in a short time the tumour formed by the abscess disappeared, and another showed itself over the left os innominatum. It was opened, and forty ounces of the most fetid pus were evacuated. Profuse suppuration continued for three months, and caused death by exhaustion. The abscesses originated from caries of the second and third lumbar vertebræ.

‡ Op. cit., p. 335.

§ In a case of Mr. Erichsen's, reported at length in THE LANCET for September 26th, 1872, a psoas abscess existed on each side of the spine—the one on the right side reaching from the third lumbar vertebra half way along the brim of the pelvis; whilst that on the left, which was very much larger, and extended into the thigh along the femoral artery as far as the profunda, had a diverticular branch over the crest of the ilium, and a tributary stream which ran along the brim of the pelvis to join the main abscess. The abscesses on the right and left side communicated across the fourth lumbar vertebra. A large gap, containing masses of dead bone, was found between the last lumbar vertebra and the sacrum, and the bodies of the third, fourth, and fifth lumbar and three upper sacral vertebræ were bare. Death was the result of acute tuberculosis, affecting many of the viscera.

* Science and Art of Surgery, vol. i., p. 108.

† Art. on "Diseases of the Spine" in Holmes's System of Surgery. 2nd edit., vol. iv., p. 125. A case of "psoas abscess opening spontaneously into the intestine," which was under the care of M. Colin, is related in the Edin. Med. Journal, July 1862, p. 68.

‡ Surgical Diseases of Children.

§ Brit. Med. Journal, Feb. 5th, 1870.

‖ The Practice of Surgery.

DR. SEDGWICK SAUNDERS, medical officer of health for the City, reports that of 1428 houses inspected during the last few weeks, seventy only required sanitary alteration or improvement. The infantile death-rate in the City has been rather large, and is chiefly attributable to the prevalence of abdominal affections and atrophy. Nearly twenty tons of diseased meat had been seized and condemned.

CASE OF CONGENITAL MALFORMATION OF THE HEART.

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(*Case reported by* Mr. KELLY, *Clinical Clerk.*)

ANNE C——, aged nineteen, a dressmaker, born in Aberdeen, and residing at Leith, was admitted to bed 10, ward xiii., on December 1st, 1873, complaining of great pain over the præcordia, extending to the left back and shooting down the left arm, and of a bad sore-throat. The patient is usually deeply cyanotic, but varies in complexion; the digits on all four extremities are clubbed in a very marked degree, and the nails aduncated.

Her mother stated that last February (1873), after receiving a fright, her daughter was seized with a sudden pain in the left side, which finally settled over the præcordia. At that time she suffered much from palpitation and general feeling of oppression in the chest. This state of matters lasted till May. After a short period of comparative health she was, in June, seized with a shivering fit, and shortly after coughed up two mouthfuls of dark blood and several more of a lighter colour. Since then she has always been ailing. Her mother also stated that ever since birth she had been of a blue colour, specially marked after any exertion and in cold weather. Shortly after her birth her father contracted syphilis, which he communicated to her mother, and, through her mother, to herself and to all the children born subsequently. So that, while her brothers and sisters born previously are healthy, she and her mother both suffer from acquired syphilis, and those born subsequently from congenital syphilis.

Anne C—— is fairly developed, rather above the average height, and weighs 8 st. 3 lb. Her facial expression is dull; her complexion is of a rosy hue, sometimes livid; her lips generally, and her clubbed finger-tips always, livid, and the same remark may be made of her ankles and toes; her skin generally is not discoloured, is sometimes warm, moist, and clammy, at others cold and dry; temperature 98·4°. Her pulse varies from 68 to 75 per minute, is feeble, and equal at both wrists. The jugular veins are small, but distinct pulsation is visible in them. She has dyspnœa on the slightest exertion, no palpitation, but severe pain over the præcordia. On inspection the chest appears normal; no pulsation anywhere visible. On palpation no impulse is anywhere perceptible, even when she leans forward, but a considerable thrill is to be felt over the base of the heart. On percussion from above downwards, one inch from the left of the sternum, cardiac dulness begins at the level of the upper edge of the third rib, and extends down to the liver dulness. At the level of the fourth rib dulness begins three-quarters of an inch to the right of the sternum, and extends to the left for a distance of four inches and three-quarters. The aortic dulness is found to extend upwards to within one inch of the top of the sternum. On auscultation a loud systolic murmur is distinctly audible over the whole cardiac area, propagated with more distinctness towards the left than towards the right axilla. By careful auscultation posteriorly a faint systolic murmur is audible, evidently due to propagation through the bones. In the mitral area (between the fifth and sixth ribs, two inches and a half to the left of the sternum) this systolic murmur is shrill and distinct, followed by a faint second sound. In the tricuspid area (sternal end of the fourth, fifth, and sixth ribs on the left side) the systolic murmur is louder, more prolonged, and followed by a more distinct second sound. In the aortic area (sternal end of the second rib on the right side) the systolic murmur is shrill, distinct, and followed by a distinct second sound, often markedly accentuated, both sounds being propagated into the carotids. In the pulmonary area (sternal end of the third rib on the left side) the systolic murmur is louder and rougher than in any other part of the cardiac area, and followed by a second sound which, though always distinct, is at times quite accentuated; when it is most distinct the aortic accentuation seems to be least marked. Her respiration is 20 per minute; dyspnœa on the slightest exertion; pain in the chest; no cough or expectoration; voice hoarse; pulmonary physical signs normal. With the exception of sleeplessness, occasional shooting pain over the left temple, and the præcordial pain already referred to, her nervous system is normal. There is considerable difficulty of swallowing, from syphilitic ulceration of the uvula and swollen and congested tonsils, and slight atonic dyspepsia, digestive system otherwise normal. The urine is of a pale-sherry colour, acid, sp. gr. 1020, containing a small amount of albumen; otherwise normal; no deposit. Menstruation regular.

Remarks.—This history, thus concisely narrated, contains within itself all the elements for an accurate diagnosis. The history and symptoms of acquired syphilis, though sufficiently distressing in themselves, are purely episodic in relation to the more serious affection under which this patient labours—an affection which, from its congenital character, has necessarily embittered all her life and must shorten her days. The cyanotic condition of her surface, which has prevailed from birth, and the marked clubbing of all her digital extremities, point with unfailing accuracy to the existence of some congenital central lesion of her circulation. With regard to the production of cyanosis, three views are prevalent: first, there is the theory that it depends upon intermixture of the arterial and venous blood currents; second, that it is caused by venous congestion, depending upon obstruction to the onward flow of the blood current, from whatever cause; and, third, that it arises from a combination of the two preceding causes. Clinical experience, however, teaches us that even where the obstruction is very great, as in extreme constriction of the mitral opening—such as one now before me, which, though somewhat enlarged by long maceration in spirit, only measures five millimetres by eight,—the cyanosis is never so great as in those cases where, from congenital defect, intermixture of the two kinds of blood is possible. Whatever, therefore, may be the explanation—and it is a subject still open to inquiry,—there can be no doubt that, though the absence of great cyanosis does not disprove the structural possibility of intermixture of the blood currents, its presence is a certain proof of its occurrence, and therefore of the presence of those malformations which render it possible. This is confirmed in the present case by the existence of marked clubbing of the digital extremities—a condition which must have a cardiac origin if it extend, as in this case, to all four extremities in any marked degree. The presence of these conditions therefore enables us to conclude with certainty that in this case we have to do with congenital cardiac malformation, involving some condition capable of permitting intermixture of the arterial and venous blood currents. Now, apart from congenital deficiencies of the septa alone, which to any considerable extent are extremely rare, cause little if any cyanosis, and either give rise to no murmurs or to murmurs quite different in character and propagation from those in this case, we learn from the researches of those pathologists who have studied these malformations that the probability of the original lesion being in the pulmonary artery increases with the age of the sufferer over fifteen. The age of our patient being nineteen, there is therefore a very strong probability that her primary lesion has been in the pulmonary artery, and the marked, rough systolic murmur heard in her pulmonary area, and propagated with most distinctness towards the left axilla, renders this certain. The distinct and accurate closure of the pulmonic valves (absence of diastolic murmur) shows us that the murmur probably depends upon a constriction lying above them; as, if they were so malformed as to obstruct the exit of the blood, they would almost certainly be incompetent also. Now, the certain result of constriction of the pulmonary artery to any extent, or for any considerable period, would inevitably be a gradually increasing congestion and dilatation of the right ventricle—lengthened period of action being equivalent to increase of constriction; and of the existence of this in the present case we have ample proof in the loud systolic murmur audible over the right apex, and in the distinct jugular pulsation, which shows that the regurgitation through the tricuspid valve has been so persistent and so great that it has destroyed the valvular action of the venous valves at the root of the neck, so as to convert what must at first have been a mere undulatory movement in the venous current into a distinct pulsatory wave. The occurrence of so great a dilatation of the right ventricle sufficiently explains the

absence of an apex beat, because the dilated right ventricle, lying in front of the left one, acts as a water cushion or buffer in preventing the apex from reaching the thoracic wall; while the absence of distinct pulsation in the scrobulus cordis, and at the lowest part of the sternum, proves that the heart is feeble, and that in the right side dilatation is the prevalent lesion.

Congenital constriction of the pulmonary artery may occur at various periods of intra-uterine life, and the mechanical results on the cardiac development and consequent symptoms must vary accordingly. When it occurs just previous to the completion of the ventricular septum, and to such an extent as to prevent the complete formation of that septum, we have as a natural result the phenomenon of a complete double circulation with free intercommunication between the two ventricles, one of which is connected with an obstructed and the other with a patent arterial conduit. The natural result of this is, that when both ventricles contract with nearly equal force upon nearly equal contents, that one whose natural outflow is obstructed forces a portion of its contents through the abnormally patent channel into the other ventricle whose outlet is unimpeded; and the consequence of this is, forcible dilatation of the unimpeded outlet—in this case the aorta,—and consequently a systolic murmur of tension accompanying the blood wave and followed by a loud accentuated aortic second, the natural result of the forcible closure of the aortic semilunar valves by an unusually heavy column of blood, precisely the usual condition in this case. When, however, from any cause—such as catarrhal congestion—the pulmonary circulation is more than usually obstructed, the result is the same as in the normal condition: the blood-recoil upon the pulmonary valves is greatly increased, and we have an apparent and temporary transference of the accentuation from the aortic to the pulmonic second sound—a phenomenon which repeatedly occurred in this case while the patient remained under observation.

As to the systolic murmur in the mitral area, the absence of distinct propagation round the left side to the back is opposed to the idea of any regurgitation through the mitral valve. The conditions necessary for the production of this regurgitation were, moreover, entirely absent: because free communication between the ventricles prevents the possibility of over-dilatation of the left ventricle and regurgitation from this cause; while congenital mitral constriction, which might give rise to it, would not only be a very unusual complication in such a case, but is also conclusively disproved by the entire absence of any evidence of dilatation of the left auricle, which in all such cases is sure to be revealed by distinct pulsation to the left of the pulmonary area and in the same plane, evincing dilatation and hypertrophy of the left auricular appendix. The systolic murmur over the left apex is therefore due to propagation from the aortic and pulmonary regions, and possibly also to propagation from the opening in the upper part of the ventricular septum, which I have shown to exist.

In this most interesting case, therefore, there exists contraction of the pulmonary artery above the valves, with deficiency of the interventricular septum at its upper part, dilatation of the right ventricle with destruction of the venous valves at the root of the neck, and dilatation of the ascending aorta; and these conditions may be accepted as facts conclusively proved by the phenomena present. But there is one other malformation the presence of which is rendered probable by what we know of the sequential development of the heart, though it is not, and, so far as I know, cannot be, revealed by any diagnostic phenomena—and that is, more or less imperfect occlusion of the foramen ovale. Not only, therefore, has it been shown that in this case the symptoms depend upon congenital malformation—an opinion which even a cursory inspection of the patient would lead almost everyone to adopt,—but it has also been shown that the physical signs present confirm this view, and that these are precisely such as our knowledge of the sequential development of the heart and of the mode in which these physical signs are produced would lead us to expect to be present in a case of pulmonary constriction arising at a certain period of intra-uterine gestation. The ease with which we can now interpret the symptoms and signs in a case so complicated as the present, compared with the difficulties which formerly beset the diagnosis of the simplest valvular lesion, exhibits in a most striking manner the very great advance in the diagnosis of cardiac disease which has taken place during the last thirty years.

I have only to add that, under appropriate treatment, the patient left the infirmary improved in every respect, and that she still remains under observation.

Edinburgh.

ON THE COMPARATIVE ACTION OF ALCOHOL AND ABSINTHE.

BY DR. MAGNAN,

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PATIENTS affected with acute alcoholism may offer the following peculiarities:—

1. Some of them present convulsive phenomena, which nothing in the previous symptoms allowed us to foresee. The patient, in fact, all at once loses consciousness, and suddenly falls; the face becomes pale, the limbs stiffen, and the muscles of the trunk and neck contract, so as to turn the head to one side. To this stage of tonic spasm soon succeed clonic spasms, twitchings in the arms and legs, with grimaces of the face, and convulsive movements of the eyes; frothy saliva, occasionally tinged with red, covers the mouth, and the tongue is bitten; then the lips grow blue, the face livid, and the breathing stertorous, whilst the urine and fæces escape involuntarily; a more or less prolonged state of stupor following the fit.

We have here, it is evident, an attack of epilepsy. Such a fit may occur equally at the periods of onset, of full establishment, or of the decline of the attack of delirium tremens—that is to say, in stages of the attack when the trembling is very violent, or, on the other hand, very slight. After the attack the trembling follows its usual course: it diminishes if the attack of delirium tremens is on the decline; it increases, on the contrary, if the fit has come on at the earlier part of the attack.

The fit, then, is not the highest expression of the motor disturbance, nor is it the most advanced degree of that general tremulousness which accompanies delirium tremens; it is an accident of a different order, superadded to the other disturbances of motility, and due to a distinct cause, which from the antecedent history is usually absinthe, more rarely bitters, vermouth, or *vin blanc*, the adulterated white wine which is sold retail in Paris by most of the wine merchants, and is very different from that drunk in the neighbourhood of Vignobles.

An acquaintance with this fact is not unimportant either from a diagnostic or therapeutic point of view; and perhaps bleeding would have been used more moderately for patients affected with epilepsy wrongly called "alcoholic," if practitioners had been thoroughly impressed with the idea that the attack was due to the direct action of a poison which possesses the special property of stimulating the excito-motor functions of the medulla and spinal cord, without the necessary intervention on the part of the brain of that determination of blood to which certain writers have ascribed the principal *rôle* in the production of convulsive seizures.

To sum up, the epileptic attack is an exceptional phenomenon due to a special cause, and independent of the degree of trembling.

2. In certain rarer cases, in patients suffering from acute alcoholism, we observe the occurrence of an attack of delirium which presents all the general characters of alcoholism—that is to say, hallucinations of very changeable character, of painful, disagreeable, and aggressive nature, recalling, it may be, either the profession of the individual or the dominant preoccupations of the time of attack. But with this characteristic delirium the trembling in this class of patients is next to nothing; it may even be entirely wanting, so that the attack of acute alcoholism may be found reduced simply to intellectual disturbances. Cases of this kind have been on record for some years past. M. Motet relates some observations of the kind in his thesis of 1859 "On Alcoholism, and the Poisonous Effects produced in Man by the Liqueur Absinthe." In his cases the patients were especially drinkers of absinthe.

How are we to explain this rapid evolution of delirium in the absence of motor disturbances? It is that absinthe acts in the same way as belladonna, henbane, datura, and haschisch (cannabis Indica), and does not require, like alcohol, to prepare its way, for, as is shown by physiological experiment, it can rapidly give rise to hallucinations and delirium before the alcohol contained in the liqueur of absinthe has had time to produce trembling in man. We have here, then, a second fact—viz., the premature appearance of hallucinatory disturbance without trembling—a fact which, from clinical observation alone, we might attribute to the absinthe, and of which physiological experiment gives us the confirmation.

3. In the greater number of cases of patients affected with acute alcoholism, the trembling and intellectual disturbances progress simultaneously, or present only slight differences in their successive evolution. These patients, according to what we can ascertain about them, have usually wine or brandy only to excess.

The present communication has for its object to furnish experimental proof of the facts taught us by clinical observation.

Before showing the action of essence of absinthe on the nervous centres, it is needful to recall in a few words the mode of action of alcohol. Let us observe, for example, what takes place in a dog submitted to the poisonous action of this agent. Some minutes after the administration of the alcohol the animal leaps, yelps, and runs in every direction, then staggers and becomes stupefied; the paws, especially the hinder ones, cross each other and give way under him. The paralysis at first of the hind quarters soon reaches the fore part of the body; the animal falls into a state of complete relaxation and comatose sleep; when raised he sinks like a lifeless mass, all energy and elasticity being lost. The temperature is lowered, sensibility is abolished and cannot be aroused, in cases of complete intoxication, by the most active excitants. These symptoms are reproduced in the same animal every time it is submitted to the action of alcohol, and during ten or twelve days we do not see any new symptoms supervene; there are no alterations in the general behaviour, no illusions or hallucinations, and no epileptic or epileptiform attacks. But if one continues to administer a daily dose of alcohol, sufficient to bring on intoxication, one remarks in the dog from about the fifteenth day a nervous excitability of quite peculiar character. The animal is melancholy and uneasy; he listens, the least noise makes him start; when the door is opened, seized with fright, he runs and crouches in the darkest corner of the room; he no longer responds when patted, he runs away and tries to bite when one attempts to take hold of him, and utters sharp cries at the mere threat of blows. This irritable and timid condition increases each day, and from the end of the first month, illusions and hallucinations becoming added to it, it is transformed into a veritable delirium. In the middle of the night he utters plaintive moans, or even whilst all is quiet he begins to bark, the cries becoming louder and more frequent, as if an enemy were approaching; speaking or calling does not reassure him—one must interfere with a light. At last, during the day he growls without cause; then thinking that he is pursued, he cries out, runs scared hither and thither, with his head turned back, and snapping in the air.

In some cases the hallucinations and delirium are the causes of fatal accidents, the animal in its flight may fall out of a window or down stairs exactly like a drunken man. With these intellectual troubles one sees, from the second month, a trembling appear, which is at first limited to the paws, but gradually becomes general, and reaches the muscles of the trunk and head. This trembling sometimes persists for twelve hours in the day, and follows each fresh dose of alcohol; it presents a rhythmic type, with short and somewhat rapid oscillations, is of variable intensity, stopping for a few moments, and is complicated, moreover, from time to time by tremors in small isolated groups of muscles. But never, in the experiments with alcohol, is an epileptic attack produced, whilst this, as we are about to make evident, is the principal manifestation of poisoning by absinthe.

In a weak dose, essence of absinthe induces a more or less marked muscular tremor, little abrupt jerking shocks, like electric discharges, repeated one or several times, in the muscles of the neck, and giving rise to rapid and very limited movements of the head, which is carried upwards and backwards; the contractions reach in succession the muscles of the shoulders and the back, and then provoke stronger abrupt contractions, which raise, by jerks, the anterior part of the body. This action of absinthe, more especially directed to the head and neck—that is to say, its influence upon the bulbo-cervical region of the cord, is the more remarkable because alcohol acts in the reverse order. The latter, in fact, as we have seen, produces at the onset paraplegia, before paralysing the anterior parts of the body; absinthe, on the contrary, provokes spasmodic contractions in the fore-quarters before producing generalised convulsions. And this is not all: sometimes one sees a very interesting phenomenon come on in the dog; the animal stops all of a sudden, stays motionless as if stupefied, with the head low, a dull look, and the tail hanging down. It keeps this attitude for thirty seconds to two minutes, and then spontaneously regains its habitual appearance. This is a vertiginous condition, which is not without analogy to the *petit mal* or "absence" of the epileptic.

The action of the essence of absinthe in a large dose is different, or, rather, it is a higher degree of intensity of the phenomena.

After prodromata analogous to the occurrences of which we have just spoken, or even abruptly and more or less rapidly, according to the mode of introduction of the poison, epileptic attacks come on: the animal loses consciousness, falls, and stiffens in the tonic convulsions which form the first stage of the fit. Most frequently the extensor muscles of the neck and back contract energetically so as to produce opisthotonos; but with this one almost always remarks a slight pleurosthotonos either to the right or to the left. Sometimes, in place of an extension of the head, it is flexion which is in excess, and which may by a forcible emprosthotonos make the animal turn over itself. To the tonic convulsions succeed, after the lapse of a few seconds, clonic convulsions, with snapping of the jaws, foam (sometimes bloody) on the lips, and biting of the tongue; and one sees the evacuation of urine and fæcal matters, and even of semen, occur in some cases. The attack over, the animal continues in a state of slight stupefaction for a brief interval. The attacks of epilepsy show themselves sometimes with this *ensemble* of symptoms, and leave intervals between them of ten or twenty minutes, or even longer.

The action of essence of absinthe, however, does not reveal itself only by a stimulation of the excito-motor power of the nerve-centres; it shows itself also by intellectual disturbances; and, acting in an inverse mode to that of alcohol, which requires a certain time to produce delirium, this substance gives rise to hallucinations at the first onset, without previous preparation, in an animal which up to that time was free from every ailment. In fact, what we see in the dog, in some cases, after intravenous, subcutaneous, or stomachal injections of essence of absinthe, is as follows:—In the interval between two epileptic attacks, and sometimes before the convulsive symptoms, or even without convulsions, the animal is seized with an attack of delirium. All of a sudden he erects himself on his paws, the hair bristles, the look becomes wild, the eyes, injected and brilliant, staring at some particular spot where there is nothing apparent to draw his attention; he barks furiously; advances and retires as before an enemy; with open mouth, he throws his head suddenly forwards, and immediately shuts his jaws and shakes them from side to side as if he wished to tear his prey in pieces. This attack of delirium may recur several times; then the effects pass off, and the animal becomes quite calm.

It is not necessary to insist here upon the parts which belong to the spinal cord and to the brain respectively in the production of this group of symptoms. It will be sufficient to call to mind that, after section of the cord below the medulla oblongata, we obtain separately and at different times an attack of bulbar epilepsy (head, eyes, mouth, and face), and an attack of spinal epilepsy (limbs, trunk, and neck). On the other hand, after the removal of the cerebral hemispheres, the convulsions are produced in the same manner. Lastly, we have seen that the delirium may show itself without convulsive seizures. All these are so many proofs demonstrating that the cerebro-spinal axis in its entirety concurs in the production of epilepsy; but that each one of the parts may be influenced separately, and may give rise to a determinate group of symptoms. We will add,

moreover, that the essence of absinthe is a valuable agent for the study of the mechanism of epilepsy, and for the observation of the changes in the cerebral or retinal circulation which accompany the different periods of the attack.*

CASE OF

PRIMARY SCIRRHUS CANCER OF THE LARYNX; TRACHEOTOMY.

BY EDWARD J. COOKE, B.A., M.D. T.C.D.

JAMES B——, aged fifty-eight, came under my care while residing at King's Lynn in July, 1872, and gave me the following history of himself. For several years he had suffered on slight provocation from severe colds and sore-throat, attended with aphonia, which conditions were daily becoming more aggravated. He was very weak, and had some difficulty in swallowing, together with a fixed pain behind the thyroid cartilage; cough and expectoration troublesome, the phlegm often mixed with blood; loss of appetite. No history of syphilis or phthisis, but had in his early years been addicted to habits of intemperance.

I prescribed iodide of potassium in ten-grain doses three times daily with bark, also one tablespoonful of cod-liver oil once a day. Locally I applied a strong solution of iron and gargles of tannic acid with some good effect. Later on I found most benefit from the daily application of a forty-grain solution of the nitrate of silver to the ounce of water. In September he went to London, and became an out-patient at the Victoria-park Hospital, where, in addition to my internal treatment, he was ordered the iodine spray, which he continued for about six weeks, when his condition became so serious that he was advised to return home immediately, which he did on Nov. 14th, but I never heard exactly what his medical adviser thought of him. I saw him on the evening of his return; he was quite exhausted by his journey; the aphonia had increased, and swallowing was almost impossible. I prescribed an antispasmodic mixture, hot sponges to be applied to the throat, and the room to be kept warm by means of steam vapour.

Nov. 15th.—Had a wretched night; symptoms most alarming. Had an immediate consultation with my colleague, Dr. Lowe, and we agreed that tracheotomy was urgently demanded, as affording the only chance for my patient's safety.—2 P.M.: Respiration 64; pulse 140. I proceeded to open the trachea, without chloroform, and was somewhat hindered towards the latter part of the operation by the hurried breathing, which rendered any fixation of the trachea difficult even for a moment. After cutting upwards through three or four rings of the trachea, air began to enter, but was much impeded by quantities of purulent mucus, which almost filled the opening, so much so that it was with much difficulty the tube was first introduced, and had to be extracted immediately, as the patient's breathing was so obstructed for a few minutes by the cause above-mentioned. After a few minutes the tube was again introduced, and retained in position by means of tapes round the neck. The hæmorrhage, which was of a venous character, was slight. I was ably assisted during the operation by Dr. Lowe and Mr. Plowright. The latter kindly remained with the patient for several hours, and was constantly employed in keeping the tube free.—8 P.M.: Pulse 100; respiration 32; expectoration less; slept at intervals.

16th.—Slept several hours during the night. Pulse 96; respiration 30. Deglutition less difficult; took quantities of beef-tea, eggs, &c. Wrote on the slate he felt more comfortable than he had done for months. During the morning the tube slipped out three times; eventually I put in one larger, and with a sharper curve, and had no further trouble with it.

21st.—All conditions improved. Pulse 86; respiration 28. Sleeps most of his time.

30th.—Wrote on the slate that he felt much better. Can speak a little when his finger is applied over the opening of the tube. Can swallow freely.

It would be tedious to relate his daily history, and it will be sufficient to state that he continued to improve for about five weeks, when a small and painful abscess appeared in the thyro-hyoid space, which I opened on three occasions. This led me still more to regard the case as one of diseased cartilages. The laryngoscope from the first gave no accurate evidence of the true condition of the parts affected beyond turgescence of the epiglottis and vocal cords, the larynx being so sensitive as to render careful examination impossible. This small abscess now disappeared, and was soon followed by pain about the artificial opening, as if something pressed on the tube and also hindered deglutition. On removal of the tube, I found it was pressed out of its course by what seemed to be large unhealthy granulations. These I reduced by application of nitrate of silver. After this he again took large quantities of nourishment—port wine, &c.—and sat up daily; could eat an apple, and seemed to gain much flesh. About the end of March he felt much pain in the right parotid region, followed by a very tense swelling, which I poulticed; this gave some relief. Perspires very much; tendency to a low form of bronchitis. Towards the end of April I opened this swelling, but got no matter, only serum. The opening healed rapidly. On July 1st saw him for the last time. He was much weaker, but sat in the open air when weather permitted. About the middle of July his wife wrote to inform me he was unable to leave his bed; all fluids passed through the tube. He now suffered very little pain till the night before he died, which was passed in great suffering, and he expired August 15th, exactly nine months from the date of operation.

Notes of the post-mortem appearances were supplied me by the kindness of Mr. Plowright, then house-surgeon to the Lynn Hospital. There existed the remains of an extensive abscess of the right side of the larynx, reaching upwards to the angle of the lower jaw, "which was roughened"; the vocal cords were destroyed, the upper portion of the larynx being grown up by what both Dr. Lowe and Mr. Plowright pronounced to be a "scirrhous mass"; the abscess also extended downwards into the chest, and it was surprising how any one could have lived so long with such a mass of complicated disease in his larynx, which was all but impervious. The thorax was not examined.

Remarks.—The post-mortem examination revealed a state of things which up to my last visit was not suspected, as I looked on the disease as strumous ulceration of the cartilages, and regret that repeated attempts to examine his larynx failed, owing to the extreme sensitiveness of that organ, and later on to his inability to open his jaws wide. The case cannot fail to be of interest to the profession, not only from the prolonged existence of the patient, but also from the fact that cancer is happily a rare primary disease of the larynx, only a few cases having been demonstrated during life by Dr. Walker, of Peterborough, Sir Duncan Gibb, of London, and Dr. Johnson; that it generally exists in the epithelial or medullary form, and, according to the most reliable authorities, chiefly as a secondary disease. As far as the operation is concerned, this case undoubtedly proves, with many others, that, even under the most extreme circumstances, tracheotomy often furnishes most encouraging results, the greatest danger being delay.

Sheffield.

SLIGHT INJURY TO LEG; SUDDEN DEATH; THROMBI IN RIGHT VENTRICLE FROM POPLITEAL VEIN.

BY A. B. SHEPHERD, M.A., M.B.,
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THE following case presents many points of similarity to those lately published in THE LANCET by Surgeon Thomas Browne, M.D. (June 27th, 1874, p. 901), and Mr. Geo. G. Gascoyen (Aug. 8th, p. 189). For the life-history I am indebted to Dr. Stewart, of Southwick-street; for the post-mortem notes I am entirely responsible.

R. G——, aged forty-nine, a healthy, spare, though largely-made man, of active and temperate habits, slipped, on June 1st, 1874, through the rounds of a ladder, and

* Magnan: Recherches de Physiologie Pathologique avec l'Alcool et l'Essence d'Absinthe. "Epilepsie" (Arch. de Phys. Normale et Pathol., Mars et Mai, 1873), &c.

abraded his left shin. Under ordinary treatment the wounds so caused almost entirely healed. On the twenty-first day after the accident, while going up stairs, he fainted and fell, without suffering any apparent injury. Three days later he had a rigor, followed by well-marked signs of simple pleurisy on the right side, the diagnosis being confirmed by Dr. Walshe, who saw him whilst suffering from the attack. On the thirtieth day after the accident, he fell down while dressing, and died.

The autopsy was made forty-eight hours after death. There was most extensive decomposition of the head, neck, and upper extremities, the superficial veins being much discoloured. There was no great decomposition of the body externally below the level of the diaphragm. All the organs were healthy, but very much decomposed. The blood throughout the body, with the exceptions noticed below, was fluid. Coiled up in the apex of the right ventricle were three moulded clots, one showing most beautifully the impression of vein-valves. Two of these clots exceeded 7¼ in. in length each. Only one very small clot, soft and recent, was found in a branch of the pulmonary artery. The subclavian, jugular, iliac, and femoral veins, and the vena cava were carefully examined. The left internal saphena was removed from two inches below the original wound to its entrance into the femoral, and the latter itself to below the popliteal vein. On slitting up the saphena, the coats of the vein below the region of the wound were found to be perfectly normal, semi-transparent, and drying rapidly on exposure to the air. Nearer the wound its coats cut more rottenly, and where the smaller veins from the wound entered it, it was dilated. From this point upwards, its internal coat, as well as that of the veins from the wound, and of those dipping down to the deeper vessels, was intensely red, more than bloodstained, swollen, and moist, even after long exposure to the air. The same was the case with the femoral and popliteal veins; the coats of the latter were greatly swollen, and injected a dark, black-currant colour; and in the popliteal vein itself lay the débris of a clot, non-adherent to the vessel-wall, and extending for more than three inches from above to below a pair of valves, the same, in all probability, which had left their impression on the clot in the right ventricle.

The heart-clots, together with the veins engaged in the morbid process, are preserved in the Museum of St. Mary's Hospital.

Remarks.—It is impossible to add much to the simple interest of this case. The very slight injury to the leg; the consequent thrombosis occurring in the vessels running from the wound, unaccompanied by obstruction, œdema, or pain in the limb; the dislodgment of the clots and of portions of them; the fainting-fit, due either to pulmonary embolism, of which, however, no sign was found, or to the presence only in the ventricle of a clot or clots; the pleurisy, also probably embolic; the sudden death, due to the thrombi in the heart: such was the succession of events. The first seat of the *original* thrombus must remain a matter of speculation. One of the clots removed from the heart shows, by its concentrically deposited layers at one end, that it is a *prolonged* thrombus, much increased in size since it commenced to travel; and the marked signs of morbid action throughout the course of the saphena, popliteal, and femoral veins, make the original starting-point more doubtful still. Most noteworthy is the agreement of the valve-impressed thrombus in the heart with the position of the less firm clot found in the vessel.

Seymour-street, Portman-square, W.

CASE OF DISLOCATION OF THE FIRST METATARSAL BONE.

BY J. W. TROTTER,
REGIMENTAL HOSPITAL, COLDSTREAM GUARDS.

I WAS called to see Private F. L——, two years' service, aged twenty-two years, 2nd battalion Coldstream Guards, having just injured his foot while being practised in the Military Gymnasium. I found him complaining of severe pain in his right foot, and on examination detected a considerable prominence over the internal cuneiform bone, caused by the base of the first metatarsal being tilted on to its upper surface. The bone was readily reduced by traction with manipulation.

The injury was caused by his falling, when about twelve feet from the ground, while scaling a wall, his weight being received on his right foot, the toes at the same time being bent backwards.

I think the case worthy of record, as such an accident to one metatarsal bone appears exceedingly rare, as well as for the ease with which reduction was effected; the latter, I take it, depending on the early period the man was brought under treatment. Three hours after the accident the whole of the upper part of the foot was much swollen, so that it would have been somewhat difficult to recognise the nature of the accident, and still more so to effect reduction.

A Mirror OF HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

GUNSHOT FRACTURE OF THE SKULL; TREPHINING, AND REMOVAL OF MANY LARGE PIECES OF BONE AND THE BULLET; RECOVERY.

(Under the care of Mr. GEORGE LAWSON.)

FOR the notes of the following case we are indebted to Mr. H. H. Smith, who was at the time the house-surgeon.

On the 21st March, 1874, a young healthy-looking man, aged twenty, determined to commit suicide; and for this purpose he bought a piece of iron gas-pipe and some pistol cartridges, and then, with great perseverance, constructed during the night the machine with which he intended to shoot himself in the morning. To one end of the portion of gas-pipe, which was six inches long and half an inch in diameter, he screwed on what is technically known as a "junction," one inch long—that is, a rim of iron fitted with a screw at each end, for the purpose of uniting two portions of iron pipe. Into the open end of this junction he fitted a boxwood plug, but, finding that the plug was not sufficiently tight for the breech of his gun, he soaked the whole apparatus for some hours in water to swell the wood, whilst he smoked his pipe and wrote to his friends. In his letters he expressed his regret for the act which he was about to commit, and assigned as his reasons for doing it his inability to face the difficulties before him and his love for some girl. He described his feelings whilst sitting up during the night waiting for the wood to swell, and mentioned the number of pipes he smoked. The wood having been sufficiently soaked, he next filed a touchhole through the iron junction, and then, as if doubting the strength of the breech of his gun, he lashed the wooden plug with many turns of string to the barrel. His work being now completed, he loaded his gun with powder and bullet from the cartridges, placed the breech of his gun against the wall or the table, whilst his forehead rested against the mouth, and with a match fired it.

On the morning of March 22nd, about 11.30, he was brought into the Middlesex Hospital suffering from the effects of the gunshot wound. He was quite insensible, and his face was covered with blood, which proceeded from a star-shaped wound in the forehead just above the nose. The wound and the surrounding skin were blackened with powder, and both tables of the skull were visibly extensively comminuted. There was a jagged, irregular opening in the external table of the skull, through which the finger could be easily passed, when it came upon a mass of comminuted bone of the internal table, which was pressing upon the membranes of the brain. His extremities were cold, and his pulse slow; there was no paralysis, and the pupils acted; there was no strabismus.

At 1 o'clock the patient was taken into the theatre, and Mr. Lawson proceeded to examine the wound and remove

all the detached portions of bone and the pieces which were partially broken and pressing on the brain. As the external wound of the frontal bone was much smaller than that of the internal table, two small semicircular portions of bone were removed by the trephine from above and below the opening in the external table of the skull, and with a pair of dressing forceps nine pieces of bone and the bullet were lifted away from the surface of the dura mater, which was found to be considerably lacerated. One of the fragments of bone was nearly as large as a florin, and some small pieces of the dura mater came away attached to some of the fragments of the bone. The contused and lacerated integument was then adjusted as far as possible over the wound, and a pad of wet lint, without any disinfecting fluid, was laid over the parts, and kept in position by a strip of plaster.—9 P.M.: The patient seems sensible, and has been trying to get out of bed. At the bottom of the wound the dura mater can be seen torn, and some brain-matter is pressing forward. Pulse 104; temperature 100° F.

March 23rd.—Has passed a very restless night, trying to get out of bed and to throw off the bedclothes, but has been quieter since seven o'clock. He answers questions rationally; states that he does not remember anything about the accident. He does not complain of any pain. Bowels not open; passes his urine naturally. Pulse 92; temperature 99·4°. The edges of the wound, much blackened with the powder, are everted, and the brain-substance, uncovered by dura mater, has protruded through the opening of the inner table of the skull so far forward as to touch the external edge of the bone, where it is seen pulsating. Diet, strong beef-tea and milk.—9 P.M.: Pulse 104; temperature 101·2°. His speech this afternoon is rather thick. Answers questions rationally, and knew his friends who came to see him. Is still restless, and has some tendency to muttering delirium.

24th.—Pulse 88; temperature 99·8°. Passed a quieter night; has some tendency to delirium; answers questions quite rationally; no pain; bowels not open; takes nourishment well, and complains of being hungry. The wound is suppurating freely, and the brain-matter is now protruded to a level with the skin. Had a chop for dinner, and ordered a laxative enema. If restless he is to be injected subcutaneously with one-sixth of a grain of morphia.—10.30 P.M.: Is very restless and noisy, and has been injected with morphia.

25th.—Pulse 92; temperature 102·2°. After the second subcutaneous injection of morphia he slept well; bowels thoroughly opened by the enema; talking a great deal, but is perfectly rational, and asks for what he wants; at times he is rambling; the pulse full and bounding; wound suppurating freely, and the brain is protruding beyond the edges of the wound.—2 P.M.: Ordered twelve leeches, six to be placed behind each ear.—9 P.M.: The patient has been more quiet since the leeches, and is sleeping easily; no rambling. Pulse 92; temperature 102·8°.

26th.—Pulse 100; temperature 99·4°. He was very noisy in the early part of the night, but slept in snatches towards morning; perfectly rational, but very querulous; wound suppurating.

27th.—Pulse 84; temperature 100°. Slept well first part of night, but very noisy towards morning; the protrusion of brain is not so prominent.

28th.—Pulse 80; temperature 100·4°. Very noisy and restless all night, and had no sleep; bowels relieved by enema; the hernia cerebri is slowly receding. Ordered a draught containing twenty grains of bromide of potassium. 2 P.M.: Has been much quieter since the draught.

Without continuing the daily reports, it will be sufficient to state that the patient steadily progressed towards recovery; at times he was extremely noisy, talkative, and restless, but this condition was generally relieved by a dose of twenty grains of the bromide of potassium, which was repeated if necessary every four hours. The pulse and temperature became normal, the hernia cerebri completely receded, and the skin cicatrised firmly over the wound. On June 5th the patient was discharged. He was apparently quite well. There was a small unhealed spot, about the size of a split-pea. He felt strong and well, and seemed in his usual health. He had no headache nor any impairment of speech or memory. The patient has since repeatedly visited the hospital. The wound has quite healed, and there is a firm depressed cicatrix in the site of the injury, through which pulsations are visible.

WEST LONDON HOSPITAL.

STONE IN THE BLADDER; LITHOTRITY; RECOVERY AND DEPARTURE FROM THE HOSPITAL; SUBSEQUENT DEATH FROM ALBUMINURIA.

(Under the care of Mr. TEEVAN.)

JOHN C——, a mechanic, aged twenty-one, came to the hospital on Aug. 31st, 1872, suffering from retention of urine. Mr. Teevan passed a small olivary elastic catheter, and drew off the urine, which flowed with great force, not only through the catheter, but by its sides; and as he considered this latter fact indicative of stone, he introduced a sound, and detected a small calculus lying at the neck of the bladder.

The patient entered the institution on Sept. 2nd, and stated that until the attack of retention he had only suffered from frequent micturition for a few weeks. He was of stunted growth, cachectic appearance, and dejected aspect. The senior house-surgeon, Mr. Ward, reported that there was no albumen in the urine, but that there was some consolidation of the left lung. The patient was well fed, and kept quiet till Sept. 15th, when at 3 P.M. he mounted the operating table unassisted. As the meatus externus was preternaturally small, Mr. Teevan enlarged it with a probe-pointed bistoury, the ether spray being applied by Mr. Ward. A scoop was then introduced into the bladder, and, after a few minutes' search, a stone half an inch in diameter was caught and crushed. The débris removed in the instrument was phosphatic. The patient suffered very little pain, although no anæsthetic was administered, and walked downstairs to his bed. Shortly afterwards considerable hæmorrhage took place from the meatus externus, which was speedily arrested. On Sept. 19th the pulse had risen to 104, and the temperature, as taken by Mr. Ward, to 100·7°; and, as there was much pain and tenderness over the cæcum, he was transferred to Dr. Goddard Rogers. Whilst under that gentleman's care the patient's pulse rose to 132, and the temperature to 104·2°; but the exacerbation was only temporary, for on the evening of the 22nd they both began to fall, day by day, till the 28th, when they were 72 and 100° respectively, as ascertained by Mr. Ward. The patient passed a large piece of stone whilst on the closet on the 29th, which he was unable to preserve. By Oct. 5th he was much improved in health, and free from any local annoyance, and the urine was quite clear and could be retained for a long period without inconvenience. The patient was now allowed to go out in the garden, and was directed to run up and down the stairs of the hospital twice, in the presence of Mr. Ward, who reported that the trial produced no local manifestation. He left the institution on Oct. 8th perfectly cured of his complaint, and in much better health than when he came in.

Some time afterwards Mr. Teevan heard from Mr. F. Alderson, of Hammersmith, that the patient came under his care on October 28th, and that he died from albuminuria on the 31st, there being some cystitis at the time. No post-mortem was allowed.

Mr. Teevan remarked that although the case was unfortunately incomplete, it yet presented some interesting features. When the catheter was passed for the relief of the retention, the urine was expelled with great force and much pain, not only through the instrument, but by its sides, which latter fact might usually be regarded as pathognomonic of stone; for when the urine flowed, the small calculus was at the neck of the bladder and greatly irritated it, causing the organ to contract with much force. As the bladder was emptying, the stone became divested of its watery shroud, and was brought into contact with the walls of the viscus, thus still further annoying it, so that urine continued to be driven out by the sides of the catheter till the last drop was expelled. The case was noticeable in a medico-legal aspect. A pupil of Mr. Alderson's was present at the operation, and informed him that the meatus externus had been incised; but Mr. Alderson told him he must be mistaken, for when he looked for traces of the cut, seven weeks after the operation, he could find none. Did the operation cause death, or accelerate its occurrence? Apparently not; for there was a period of complete recovery, during which the patient left the hospital in much better health than when he entered.

ROTHERHAM HOSPITAL AND DISPENSARY.

INTESTINAL OBSTRUCTION; LEFT LUMBAR COLOTOMY.

(Under the care of Dr. FOOTE.)

FOR the following notes we are indebted to Mr. Garrard, house-surgeon.

Two years ago James S——, aged twenty-six, began to feel uneasiness about the rectum, attended with constipation and with occasional bloody stools, straining, and prolapse of the bowel. He was discharged from the army on this account. Latterly he had become much worse—the straining was very frequent; strong purgatives were required to effect an evacuation. The motions generally consisted of numerous small pieces accompanied by a watery and sometimes a bloody discharge. Occasionally there was no evacuation for a week. When admitted, November 7th, 1873, he seemed in fair general health, but he strained very much. The bowel came down, and he passed his stools with pain, difficulty, and tenesmus. Examined per rectum with finger, no stricture could be felt; anus quite patulous, admitting two or three fingers.

Nov. 8th.—Bowels not open for several days. Ordered two scruples of compound jalap powder with a simple enema, which effected an evacuation.

10th.—Bougie passed about seven inches, but would go no further.

27th.—Evacuations still infrequent and only produced by powerful purgatives, after which a lumpy stool is passed with much pain; colon dilated on left side above sigmoid flexure, where hard lumps can be felt. The patient is losing flesh, and the pain prevents sleep.

Dec. 2nd.—Has been in almost constant pain for several days; no sleep. Occasionally passes fluid fæces with blood and scybala. An O'Beirn's tube can be passed to the top of the rectum, but no further, the attempt producing much pain. The colon is more distended; a tumour apparent near the sigmoid flexure. In the left inguinal region is distinctly felt a hard round nodulated mass, very painful on pressure. The symptoms have now become very urgent, and the pain almost unbearable. The patient having lost flesh for some time, and being now in an apparently sinking condition, it is thought desirable to perform lumbar colotomy on the left side.

4th.—Chloroform having been administered, the usual operation was performed by an oblique incision. A ligature of doubled catgut was passed transversely across the bowel, which was then opened. The two extremities of the incision were then secured to the integument on each side, and a silver suture was applied to the middle or intermediate portion above and below. A little fæces were discharged.

5th.—Has had retention of urine, otherwise doing well. More fæces discharged to-day.

6th.—Passed a good night; no pain; perspires freely. Pulse 112; temp. 99°. A quantity of fæces discharged through the wound.

11th.—Bowel prolapsed and swollen. Ordered a cooling lotion.

16th.—Prolapse reduced. Does not sleep well on account of pain in the iliac fossa. Distinct circumscribed lump felt. An opiate to be given every night.

26th.—Incision nearly healed, but pain continues.

Jan. 1st.—The lump is disappearing, and the patient is gaining flesh and health.

Feb. 3rd.—The lump has disappeared, also the pain. Incision quite healed; patient is getting fat. To be discharged.

It is probable that this was a simple progressive fibrous stricture of the sigmoid flexure of long standing. A belt has been made for him which can be retained in position. In the pad he puts a piece of cotton wool. He finds no difficulty in attending to the calls of nature, is able to get his own livelihood as a carter, and at the present time enjoys excellent health.

WE understand that the drainage of Oxford, a scheme that has been in contemplation for a very long time, will be speedily commenced. The estimated cost of the work, which will probably embrace a period of two years, is £90,000.

Reviews and Notices of Books.

La Vie. Physiologie Humaine appliquée à l'Hygiène et à la Médecine. Par le Dr. GUSTAVE LE BON. pp. 911. Paris: Rothschild. 1874.

THIS work, which is one of considerable pretensions, has been written, the author tells us, with the view of placing physiology in a new light, and especially of pointing out its applications to hygiene and to medicine. Observations made in the course of the late wars in France have demonstrated the influence on the success of remedial agents of the constitution and habits of the sick, of the regimen to which they are subjected, and, above all, of the state of the surrounding medium. There are some practical points, he observes—such, for example, as the influence of alcohol on the wounded—which are scarcely more than alluded to in classical works, and are entirely neglected in medical and surgical treatises. Having held important offices, both in hospitals and on the field of battle, Dr. Le Bon has frequently had the opportunity of testing theories, and he now gives to the world the result of his observations and inquiries.

After a short introduction upon the origin of life, in the course of which he shows himself to be a thorough adherent of the Darwinian theory, he enters upon the subject of digestion. The account given is, like all French writing, exceedingly simple and clear, in fact almost popular, and with no attempt to enter into minutiæ. Thus, in the description of the dentine of the teeth, he only remarks "that it is composed chiefly of phosphate and carbonate of lime," and "dentine is perforated by a multitude of small parallel tubes running from the pulp cavity towards the deep surface of the enamel." Neither their size, nor their mode of termination, nor their contents are alluded to. So, again, the enamel is no further described than that it is "composed of microscopic prisms adherent to one another, and arranged vertically on the surface of the tooth." In a work professedly dealing with the hygienic aspects of physiology something should have been said of the tendency to vertical splitting of the enamel, of the necessity of keeping the teeth clean, and of avoiding the use of too cold or too hot fluids, which, enlarging the cracks, allow foreign bodies to penetrate to the dentine, and aid in producing that caries which arises also from within.

A capital account is given, drawn from Meersman, of the effects of insufficient nutriment, as seen in the famine that existed in Belgium in 1846, and from his observations and impressions of the famine during the late siege of Paris, the deaths in the latter case rising from 1272 in the middle of September, which was itself more than 400 above the average, to 4671 in the beginning of October.

The best parts of the book are those in which the author draws upon his own experience and the results of recent military events, and we shall make an extract from one of these sections, which will be interesting to some of our readers in view of the lengthened controversy in these columns some years ago between Sir James Simpson and Mr. Holmes. M. Le Bon, in speaking of the Hygiene Respiration, observes that

"Typhoid fever, anæmia, typhus, and dysentery are the diseases to which those who breathe an atmosphere insufficiently renewed are predisposed. If these individuals are wounded, they are rapidly decimated by purulent infection. Of all the facts that can be cited to show the danger to human life that results from respiring air vitiated by the products of his own respiration, especially when debilitated by disease, none is more convincing than the mortality which occurs in our hospitals, and which can only be termed frightful when compared with that of

foreign hospitals, where the system always adopted by us of immense wards containing many patients has been completely abandoned. In comparing the mortality of patients operated on during the wars of the Crimea and of the Secession, we see from the statistics of Chenu and of Woodward, that whilst the French army lost 73 per cent. of all operations, the English army only lost 40 per cent., and the Federal only 34 per cent. In this case it might be objected that the English and American wounded were, as has elsewhere in this work been stated, well fed, whilst the French were very badly fed. Insufficient food will always increase the bad effects of imperfect aeration, and it is difficult perhaps to assign to each the exact part that it plays. But in the example which follows, this reason cannot be invoked, for the patients were well cared for in time of peace, and in the most renowned hospitals.

"In some statistics in which M. Lefort compared those who had suffered from the same lesion—amputation of the thigh—he arrived at the following results, which he communicated in 1868 to the Society of Surgery:—

In the hospital containing	100	patients	25	per cent. died.
"	"	200	"	31	"
"	"	300	"	37	"
"	"	400	"	40	"
In the hospitals of Paris there die			74	"

"It thus appears that the most dangerous fields of battle are less murderous than for a wounded man to take refuge in one of the hospitals of Paris, and it may well be open to question whether any advantage they afford can counterbalance a sojourn in these dangerous establishments."

M. Le Bon adds, in a note, a description of the old Hôtel Dieu, given by Bailly, Tenon, and Lavoisier, which is to the effect that the hospital was far too crowded.

Here and there M. Le Bon shows himself somewhat behind modern research, as when he states, in speaking of the white corpuscles of the blood, that their mode of formation, their duration, and their functions, are absolutely unknown. However true the latter part of the sentence may be, their origin is tolerably well ascertained. The account in the text, as well as the illustration of the course of the renal tubuli, are incorrect, the results of the microscopical observation of Henle and subsequent writers being ignored. The rate of movement of the blood in the arteries is given at ·2 of a metre per second, which would be less than eight inches, whereas it is at least twenty inches; and so on. But altogether the errors are few.

The book upon the whole is a little too discursive. There is no object, for instance, in giving the morbid sounds of the heart and the morbid conditions of the urine in a work on physiology, as a superficial knowledge of these would be thoroughly useless to the general reader, whilst the student is taught it at a subsequent period. So again the indications for the administration of digitalis are more fitted for a work on medicine or therapeutics than for a treatise on physiology. It is possible at the same time that the particular class for whom M. Le Bon has written his work may find an advantage from such general information, and we can say with truth that the style is exceedingly good, whilst the illustrations, though in our opinion too exclusively anatomical, are superb.

Essays and Addresses by Professors and Lecturers of the Owens College, Manchester. London: Macmillan and Co. 1874.

THE contents of this volume have been published in commemoration of the opening of the new College buildings in October of last year. It would be impossible to enter upon anything like an adequate discussion of the various subjects embraced in this volume within the narrow limits of a short notice. Let it suffice, in general terms, that the topics are well selected, and have all been handled with ability—some of them with marked ability—by men of authority in the matters of which they respectively treat. The Principal's address "On some Relations of Culture to Practical Life," for example, is a good one, although Prof. Greenwood has not made so much of his subject, perhaps, as he might have done. Prof. Roscoe's address on "Original Research as a means of Education" struck us as excellent, dealing, as it does, with a subject which has not received anything like the attention in this country that it deserves. Prof. Balfour Stewart's production on "Solar Physics" is written with great clearness. Prof. Williamson's address on "Primeval Vegetation in its Relation to the Doctrines of Natural Selection and Evolution" is thoroughly well done, and, considering the interest of the subject at the present time especially, will doubtless receive the attention it deserves. Prof. A. Gamgee's address on "Science and Medicine" sketches succinctly but well, and in a philosophical spirit, the historical progress of anatomical, physiological, and medical science, and the influence which different schools, ancient and modern, have exercised, winding up with an expression of opinion, that if to-day we acknowledge the German physiologists as our masters, we may feel emboldened by our glorious scientific history to hope that we may ourselves soon take the place, which all facts lead us to think we can hold, with honour, among those who are contributing most powerfully to promote the knowledge upon which is to be based the science of medicine. We have not even enumerated the titles of all the addresses and essays, altogether fourteen in number, exclusive of the opening address by the Duke of Devonshire, the President of the College; but our readers, if they follow our advice, will procure the volume, in which they will find a variety of subjects well worthy of their careful study.

OUR LIBRARY TABLE.

A Manual of Family Medicine for India. By W. J. MOORE, L.R.C.P. Ed., M.R.C.S., Surgeon-Major H.M.'s Indian Medical Service, &c. &c. Published under the authority of the Government of India. London: Churchill. 1874.—It has long been felt that a simple, concise, and popular work on medicine, adapted to the wants of non-professional persons in India, was much needed, and this Manual of Family Medicine, by Surgeon-Major Moore, to which the prize offered by the Government of India has been awarded, appears to us to be well calculated to supply it. In a country like India, where disease is acute in its character, rapid in its progress, and where one of the most important indications in its treatment is the early recognition of its nature with a view to the adoption of appropriate remedies, and where, moreover, it must be constantly occurring that officers belonging to the various Indian departments, and their families, scattered over all parts of the country, are far removed from medical advice, the possession of a work of this kind—practical and to the point, and free from technical terms—must prove of the greatest assistance. Persons proceeding to India or to a tropical country, who are likely to be so circumstanced, could not do better, we think, than provide themselves with a copy of this book, with one of the medicine-chests containing the medicines and instruments recommended for use in this work, which is not only a judicious guide for the recognition and early treatment of common diseases, but contains some very practical information on various topics bearing on the preservation of health in hot climates.

A Practical Handbook of Dyeing and Calico-Printing. By WILLIAM CROOKES, F.R.S. Longmans. 1874.—This large, fairly printed, and well got-up volume illustrates very remarkably the impetus which the arts of dyeing and calico-printing have received from the chemical discoveries of the last twenty years. The derivations of benzol and other

coal-tar products now supply almost every possible shade of colour, and although many of these new colours are not as permanent as might be wished, their brilliancy and beauty are marvellous. The discovery of artificial alizurin, the identity of which with the substance contained in madder has been conclusively proved, has effected a revolution in the trade, and has rendered it independent of the madder-producing countries. Mr. Crookes has accomplished his extensive and difficult task with great skill and industry, and his work must long remain the authority upon the subject. We must, however, regret that he has not adopted a uniform system of notation. The old and new systems are curiously jumbled up, and although this is a matter of indifference to chemists, it will be apt to puzzle manufacturers, who cannot all know that Na_2CO_3 and NaO,CO_2 denote the same compound.

The New Chemistry. By JOSIAH P. COOKE, Erving Professor of Chemistry and Mineralogy in Harvard University. H. S. King and Co. 1874.—Professor Cooke's book is a reprint of lectures delivered in 1872 at the Lowell Institute in Boston. The science it contains is popular science in the best sense of the term. The great ideas of modern chemistry are presented with singular clearness and with very varied illustration. The style is graphic and sometimes eloquent, but never trenches upon the sensational. The reasoning is close but easy to follow, and altogether the book is well adapted for general readers who delight in an effort of thought, as well as for scientific men who wish to follow the wonderful development which chemistry has undergone of late years.

The Monthly Microscopical Journal. Edited by Dr. LAWSON. No. LXIX. September 1st, 1874. Hardwicke.—This number contains six original articles. 1. On Morbid Growths from a case of Osteoid Cancer of the Femur, by Mr. Needham. 2. Discussion on the Formula of an Immersion Objective of greater aperture than corresponds to the maximum possible for Dry Objectives, by Mr. R. Keith. 3. Final Remarks on Immersion Objectives, by J. Woodward. 4. Refracting Prism for Binocular Microscopes, by F. Wenham. 5. On the Value of High Powers in the Diagnosis of Blood-stains, by J. Richardson, of Pennsylvania. 6. An Account of certain Organisms occurring in the Liquor Sanguinis, by W. Osler. Dr. Richardson's paper proves satisfactorily that it is possible, even after the lapse of a considerable period, to diagnose, by the size of the corpuscles, the dried blood-stains of man from those of the pig, ox, and sheep, as well as those of the cat, goat, and red deer.

Contanseau's Middle-class French Series. By LÉON CONTANSEAU, Professor of the French Language and Literature in the late Royal Indian Military College, Addiscombe, and Examiner for Military and Civil Appointments. London: Longmans. 1874.—We have received a copy of this series, comprising accidence, conversation, first reading, and first exercise books, with easy delectus, and can commend them as admirably adapted for the purpose they are intended to fulfil. They are clear, simple, well-arranged, and increasingly progressive in difficulty, and so cheap as to place them within everyone's reach.

Science Primers: Physiology. By M. FOSTER, M.A., M.D., F.R.S., Fellow of Trinity College, Cambridge. London: Macmillan and Co. 1874.—This is another—the sixth—of the excellent series of Science Primers now being published by Macmillan and Co. It is uncommonly good; indeed we do not think that it would be possible to give in a similar compass a more simple, intelligible, or better account of the most important and most general facts of physiology. It should be added that these little shilling Primers are capitally illustrated.

ST. BARTHOLOMEW'S HOSPITAL.

THE Statistical Tables of the patients under treatment in the wards of St. Bartholomew's Hospital during 1873 have just been published, and do credit to the industry of Dr. Hollis, and Messrs. Butlin and Milner, the registrars, by whom they have been compiled.

There are 230 beds in the medical wards, with a nightly average of 22·12 empty beds—about 9 for males, and 13 for females,—the time between successive occupants being about 84 hours on an average, or about 2·93 days a month. The total number of medical cases admitted during the year was 2197, and there were 349 deaths. The average stay in hospital of all the medical cases was 30 days.

The surgical beds are 428 in number, and 3202 surgical patients were admitted, with 140 deaths. The average stay in the hospital of all surgical patients was 33 days. The officers of St. Bartholomew's are certainly to be congratulated on their low death-rate, which, is however, common to the whole of the wards, and does not appear to attend the peculiar practice of any one surgeon. This low death-rate must depend upon (1) extreme healthiness of the wards, (2) the absence of severe accidents and operations, or (3) especial skill on the part of the surgeons. As regards the first, under the head of erysipelas we find 33 cases admitted, with 4 deaths; 9 cases occurring in hospital, and 8 following operations (with 2 deaths). Of phlegmonous inflammation we have 54 admissions, with 9 deaths; 8 cases occurring in hospital with 1 death, and 3 cases after operation. Of diffuse cellulitis there were 24 admissions, with 6 deaths, and 3 cases occurring in hospital. Of pyæmia and septicæmia there were 3 admissions, with 2 deaths, 1 (fatal) occurring in hospital, and 1 (fatal) after operation. One fatal case of farcy was admitted; and of phagedæna there were 4 admissions, with 2 deaths, and 2 cases occurring in hospital. A total of 29 deaths from so-called "hospital diseases" does not imply any specially favourable hygienic conditions, but when we find that only 5 of these followed septic diseases originating in the hospital, we think that St. Bartholomew's may fairly be congratulated on its healthy condition.

The remarkable absence of severe and fatal accidents is shown by reference to the table of local injuries, where we find 5 cases of death from fracture of the vault of the skull, 5 from fracture of the base, and 1 from a gunshot injury; 1 fatal cut-throat; 2 deaths from injury of the chest, 3 from injury of spine, 3 of abdomen, and 2 of pelvis. In the case of the upper extremities, there was 1 death from simple fracture of the humerus, and in the lower 1 death from contusion, 2 from fractured cervix femoris, and 1 from simple fracture of both bones of the leg; giving a grand total of 25 deaths only from local injuries. Turning to the table of amputations, we find but 2 primary amputations of the thigh, and 1 secondary of the leg; 3 primary of the arm, and 2 of the forearm; all of which recovered. It is obvious, then, that in contrasting the mortality of St. Bartholomew's with that of other hospitals, account must be taken of the entire absence of those severe "smashes," generally classed under the head of "railway cases," which form such a large percentage of the fatal cases, both with and without primary amputation, elsewhere.

The table of operations is the only other material available for estimating the amount of surgical practice in the wards of the hospital. There were 3 cases of ligature of the femoral artery for aneurism, and 1 of the anterior tibial for a wound; of these cases 1 died, but we are not informed which. Two cases of excision of the hip, 4 of the knee, 1 of the elbow, and 2 of the os calcis, all of which did well, and so also 39 cases of removal of sequestra. The amputations for disease were 31 in number, of which 1 in the leg was fatal. Forty cases of cancer were operated on, with 1 death; and 46 non-malignant growths, with 1 death. Castration was performed 5 times, with 1 death, and the upper jaw removed 4 times successfully. Lithotomy was performed 8 times, with 1 death; but lithotrity was not had recourse to. Ovariotomy was performed twice, and both patients died;

colotomy once, with the same result. There were 28 cases of herniotomy, with 12 deaths; and a considerable number of minor and plastic operations, leading to no fatal issue.

Although the year 1873 seems to have been remarkable for its low mortality after operations, we find that a table which gives the percentage of deaths during the last ten years does not show such a marked difference as the experience of one year might lead us to anticipate. Thus the mortality after *primary* amputation of the thigh reaches 30, of the leg 52, of the arm 11·11, and of the forearm 3·33 per cent. After *secondary* amputation of the thigh the mortality is 47·61, of the leg 42·85, and of the arm 16·66 per cent. Of *pathological* amputations the mortality is 28·34 for the thigh, 25 for the knee-joint, 30·88 for the leg, 8·57 for the ankle, 20 for the shoulder, 17·64 for the arm, and 5·88 per cent. for the forearm—a result, after all, very much the same as that met with in other hospitals.

SNAKE-POISONING BY THE INDIAN AND AUSTRALIAN REPTILES, AND THE AMMONIA TREATMENT.

WE have frequently called attention to the subject of snake-poisoning, and more especially of late in connexion with the alleged antidotal properties of liquor ammoniæ. An opportunity has been afforded us of perusing a copy of the Report of the Commission appointed to investigate "the effects of artificial respiration, intravenous injection of ammonia, and administration of various drugs in Indian and Australian snake-poisoning, and the physiological, chemical, and microscopical nature of snake-poisons." The report is a lengthy and exhaustive one. The Commission has evidently pursued the inquiry with great care, and in a strictly systematic and scientific method, for which the President (Dr. Ewart) and members deserve great credit. To no one is more praise due than to Mr. Vincent Richards, who personally conducted every experiment from the beginning to the termination of the inquiry. Without his previous knowledge and skilful aid, the Commission confesses it could not have undertaken the series of investigations it did. The experiments detailed in the report demonstrate the absolute inertness of ammonia as a remedy for snake-bite. This result had already been arrived at by the physiologist and naturalist Fontana, who published his experimental trials with liquor ammoniæ at Florence in 1782. Prof. Halford, in ignorance, doubtless, of these unfavourable results, resuscitated this method of combating the effects of snake-poison upon persons in Australia. The results obtained by the Commission finally dispose of the question, substantiating in this, as in a great many other respects, the correctness of the observations already made known through Dr. Fayrer's scientific investigations in India, and, more recently, through his papers read before the Royal Society in this country. As this report may not be accessible to our readers, and as many of the facts and conclusions recorded in it are of an interesting and important character, especially to those residing or practising in the tropics and some of our colonial possessions, we shall detail a few of them.

Mr. Richards found, after repeated trials, that the quantity of poison expelled at each bite of a cobra in full vigour amounts to upwards of thirteen grains of the liquid and five grains of the dried virus. From the effects observed in twelve dogs subjected to the influence of an effective bite from a fresh and fully-developed cobra, it would appear that the average lapse of time between the bite and cessation of the respiratory process was only forty-two minutes, the maximum and minimum having been one hour and ten minutes and twenty-five minutes respectively. A cobra sometimes kills, however, in a much shorter time. Although the influence of artificial respiration in prolonging life was demonstrated in numerous instances, no positive evidence was obtained to indicate that the poison ever lost its lethal hold on the cerebro-spinal ganglia. Animals injected hypodermically with only half a grain of the virus succumbed, notwithstanding the most persevering application of artificial respiration. In fact, the influence of this in saving life, whether employed alone or in conjunction with certain drugs, even where very small quantities of the poison have found an entrance into the juices, is extremely problematical. Quantity for quantity, the poison of the daboia, or Russell's viper, is not so powerful in its action as that of the cobra, and even in fatal cases its action is slower. Daboia poison gives rise to more local mischief, however, than cobra poison. To pass, however, to the poisonous snakes of Australia and the alleged efficacy of the Australian treatment. The first important points which had to be determined were, the quantity of poison necessary to destroy dogs and man, and the minimum quantity which can be resisted either by dogs or man with comparative impunity; and with this view the Commission undertook a graduated series of experiments, the leading facts of which are tabulated in their report. It is shown that the time taken to kill dogs varies according to the quantity of the virus injected into the areolar tissue of the animal; that one large dog recovered after being much affected from the injection of one-fourth of a grain; that the one-eighth of a grain proved mortal to a small dog; that although two out of three dogs were much affected by an injection of one-twelfth of a grain, both ultimately recovered; and that the injection of one-sixteenth of a grain proved fatal to a dog weighing 17 lb., whilst the same quantity had no effect on a dog weighing 40 lb. As the result of numerous trials it was found that the average quantity of poison shed by a full-grown, fresh, and active cobra amounts to about thirteen grains of the liquid poison, giving four to five grains in the dried state, and that the poison becomes less and less each successive bite, until the liquid shed is not sufficiently potent to destroy dogs or fowls. Twenty-four Australian snakes were obtained by the Commission through the Governments of India and Melbourne. As a rule, the yield of poison from one of these at one vigorous bite through a plantain-leaf into a spoon amounted to a grain and a half, and in a few instances to two grains. Quantity for quantity, there is some difference of power between the poisons of the cobra and the Australian tiger-snakes (*Pseudechis porphyriacus* and the *Hoplocephalus curtus*). The poison of the two latter is weaker in its action; but one grand source of fallacy in any comparison between these Australian snakes and the cobra is, that one of the latter, as a rule, will produce at one bite as much poison as the aggregate of the eight bites of the eight tiger-snakes. There is much uncertainty as to the effectuality of the bite of the Australian snakes, and fresh relays of poison, after the glands have once been emptied of their contents, seem to be slowly secreted. In dogs, 75 per cent. of recoveries take place from the bites of the Australian snakes, and but 20 per cent. from injections of the poison. When dogs are effectively poisoned by the Australian snake-poison, even with small quantities of it, it generally proves fatal, notwithstanding any treatment; and it is reported as a noteworthy fact, that in none of the cases in which the poison was hypodermically injected, and the intravenous use of ammonia subsequently had recourse to, did the animals recover. An impression commonly prevails that the mangoose is proof against the poison of the cobra, but Dr. Fayrer has shown that this animal succumbs to its bite like any other animal. The mangoose, if left to itself to attack the snake, will, however, invariably come off the victor. It is stated in this report, though not recorded elsewhere, that the mangoose gnaws out the fangs of the snake. To conclude, however, there is one point which requires further investigation. It is stated as a remarkable fact that while the blood of a dog poisoned by venom coagulates after death, that of a human being remains permanently fluid.

SANITARY AFFAIRS AT NEWMARKET.

SANITARY doings in the town of Newmarket have occupied many columns of the daily journals lately. A somewhat severe epidemic of small-pox has come and gone, an official inquiry has been held at the instance of the Local Government Board into the amount and quality of the vaccination lately performed within the district, and two prosecutions

have been conducted against publicans for alleged violation of the 39th section of the Sanitary Act of 1866. On the 7th inst. Dr. Armistead, medical officer of health, was enabled to report to the urban authority "that there had not been a single case of small-pox in the town for more than a fortnight, that all the cases in the Heath Hospital were convalescent, and that every house infected with small-pox had been thoroughly disinfected to his entire satisfaction." The prosecutions above referred to resulted in the infliction of a fine, and the renewal of the licences after the administration of cautionary advice. (The circumstances that gave rise to these prosecutions are fully described in THE LANCET of August 8th.) The vaccination inquiry appears to have been brought about in consequence of charges preferred by the master of the workhouse against Dr. Mead, the medical officer. Mr. Courtenay Boyle and Dr. Airy were sent down by the Gwydyr House authorities to make an inquiry, and nine so-called charges against Dr. Mead were read, a verbatim copy of which we append:—

"1. The disease of small-pox was brought into the workhouse on the 1st of July, 1874, and the medical officer took no precautions to prevent the spread of the disease by vaccinating the inmates, until he was called upon to do so by order of the Board.

"2. The Board on the 28th of July drew the attention of the medical officer to the importance of taking this step. On the 31st the medical officer commenced by vaccinating twelve of the inmates only, the operation on eleven of which proved abortive.

"3. It is believed that no lymph was used by him on this occasion.

"4. That in the opinion of the guardians the medical officer ought to have used every persuasive power with the adult inmates of the workhouse to obtain their proper vaccination, whereas he, on the contrary, in the most hurried manner, addressed the old men and women in their respective wards by the abrupt question, "Does anyone wish to be vaccinated?" then retired without receiving or apparently waiting for any definite reply.

"5. That Dr. Armistead offered to supply the medical officer with such quantity of lymph as he might require.

"6. That the medical officer has shown, by many former instances of neglect, much perversity in the performance of vaccination generally at the workhouse.

"FURTHER CHARGES.

"1. Assuming the report as to the condition of some of the small-pox patients upon admission into the small-pox hospital from the workhouse to be true, the medical officer must, in the performance of his duty in the daily visiting the patients, have been aware of their filthy state, and ought therefore to have drawn the attention of the master to the facts.

"2. In entering his attendance upon the patients suffering from small-pox in his Medical Relief Book, visits are said to have been made in almost every case for days after the removal to the Heath Hospital or death.

"3. In this book, in the column headed 'Extras—what ordered,' entries have been made after the time 'when ordered' is past, and the weekly account closed, adding to the extras originally ordered for the patients. The object in doing so requires explanation, and under any circumstances must be most improper."

The master of the workhouse, several inmates of the establishment, Drs. Armistead, Gray, Fyson, and Wright, the sanitary inspector of the district, were examined; the Rev. J. Denman, the Rev. S. Knight, Mr. Wing, and others were called on behalf of Dr. Mead, and the latter gentleman was then examined under protest, wishing for an adjournment in order that he might consider the evidence that had been given against him. This evidence, summarised as far as possible, was to the effect—(1) that small-pox being present in the town, sufficient diligence was not used in obtaining a supply of lymph, or in vaccinating the inmates, or in inducing them to get revaccinated; (2) that some careless and undignified conversation took place respecting the removal of an old patient who was suffering with small-pox to the Heath Hospital; (3) that certain entries in the medical officer's diary required by the authorities were made irregularly or inaccurately. The inquiry was closed on the 5th instant.

The charges above indicated of course tend to compromise very seriously the position of the accused. In recapitulating and considering the evidence adduced, much of which was vague and contradictory, it is, as we take it, sufficiently plain that the conduct of medical work as lately performed at Newmarket Workhouse shows a great want of precision, dignity, and discretion. A want of precision is shown in the absence of any regular system of revaccination when its importance was superlative, and in irregularities in the clerical work, which latter, however tiresome, is part and parcel of the duties of a public medical officer. A want of dignity is shown in discussing the condition of patients, with and before the officials of the establishment, in a style capable of any amount of misinterpretation; and a want of discretion is shown in going away from duty when an epidemic existed, without reporting such absence, although a proper substitute was provided.

We forbear to criticise certain items of medical evidence adduced at the prosecutions above referred to, because it is possible that they may have been incorrectly reported in the daily journals. It is a matter of great congratulation to know that Newmarket is now free from small-pox, and very great credit is due to Dr. Armistead, medical officer of health, through whose energy and practical exertions the disease has been so completely stamped out.

MURDER OF CAPTAIN J. D. BIRD, 20TH HUSSARS, AT ALDERSHOT.

ON Saturday, the 12th inst., Captain Bird proceeded with a squad of his troop to the rifle range for practice. The firing from the 250 yards distance had been concluded, and the party, having retired to 300 yards, were drawn up a little in advance, and to the left of Captain Bird, for further exercise, when Private Smith, having stepped back several paces, discharged his carbine at that officer, who, bending at the time to read the register in which the result of each shot is entered, fell forward immediately. In less than two minutes Surgeon Andrews, Army Medical Department, was present, but found him pulseless and in a state of extreme collapse; within ten minutes all sign of life had ceased. The bullet had entered midway between the angle of the left scapula and the spine, and passing upwards and to the right, emerged at a point about two inches and a half above the right nipple, and a inch and a half external to it; but was so far spent that it was unable to penetrate further, and was found loose between the clothes and skin. There was no hæmorrhage externally before death, but during the removal of the body a considerable quantity of blood poured from the posterior wound, rendering it probable that the piercing of some of the large vessels was the cause of the sudden collapse.

Private Smith had, on the day previous to the murder, been sentenced to seven days' confinement to barracks for an act of insubordination, and on the morning of its perpetration requested a comrade to take care of his dog in case he should not return from the rifle range.

During the magisterial inquiry, which succeeded the coroner's verdict of "Wilful Murder," the prisoner preserved an unrelenting and determined demeanour, and now awaits his trial in the custody of the civil authorities.

On Tuesday, the 15th inst., the remains of the unfortunate officer were interred in the Aldershot cemetery with the usual military honours; but in the immense voluntary attendance of men and officers from all the regiments, corps, and departments of the division, there accompanied him to the grave a heartfelt tribute of silent sorrow and respect such as has seldom been exceeded at any military funeral.

TYPHUS and typhoid fever still prevail extensively in Leith. The whole of the wards in the hospital are filled.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 19, 1874.

THERE is some reason to believe that, however faulty the system of medical examinations is in this country, it is less blameworthy than the system of medical education. A table, showing the results of all the examinations in the three kingdoms for obtaining medical qualifications and degrees, appears annually in the Returns of the General Medical Council, which, now that it is compiled with considerable approach to accuracy, is of great interest and importance. The present moment is an opportune one for considering the information to be gathered from this table. In a week or two more the great company of medical students will have gathered in London to begin work. The examinations of which these tables give the results are the great "rocks ahead" for them to regard. Care about more remote difficulties would, to say the least, be premature. We are disposed to say that such care would be superfluous. Let students but qualify themselves well for their examinations and they will qualify themselves for the ultimate duties of practice. In so doing they will "lay up in store for themselves a good foundation against the time to come." We have some reason to believe that the examining bodies of the country are doing their work with much greater care than they used to do, doubtless in consequence of the amount of wholesome criticism to which it has been lately subjected. It is still possible for a man to pass the College of Surgeons in England who holds the opinion that the spleen is situated in the right hypochondrium. But we have some proof that the men who pass the Final Examinations are better informed than they were a few years ago. There is a general conviction that the average knowledge and competence of men entering the profession is steadily increasing. And there is the fact that, in the examination of candidates for Commissions in the Medical Department of the Army last year, every candidate but one passed. In the case of the army, the qualifications of the candidates —71 in number—were 41 Irish, 21 Scotch, and 9 English. It will be a great compliment to the examining bodies if the authorities of the Army Department shall come to be so satisfied with the sufficiency of the test of the ordinary examinations for diplomas and degrees as to be induced to abolish the special test for candidates for their commissions, which has been most valuable in showing the laxity of the examining bodies.

The great result of public consequence and of moment to students exposed by the table we have mentioned is that in the examinations for the common qualifications and in those for the degrees there is a very large number of rejections. In the case of the examinations for the degrees, it may be thought that this large number of rejections is not remarkable. But it is a painful and discreditable fact that in the examinations for the ordinary qualifications—licensing men to practise—and admittedly not very difficult—the number of rejections is very considerable. The number of these common qualifications, taken in 1873, was 1140; of which 624 were English, 282 Scotch, and 234 Irish. In the respective divisions of the kingdom the qualifications in chief demand were as follows:—The membership of the College of Surgeons was acquired in 369 cases; the licence of the Royal College of Physicians, Edinburgh, in 132; the licence of the Royal College of Surgeons in Ireland in 131.

But what pains us so much to see is the proportion of rejections—a number bearing no special relation to the reputation of the bodies for stringency. It is in the *First Examinations*, in the subjects of Anatomy, Chemistry, Physiology, &c., that the largest proportion of students come to grief. Thus, in the First Examinations of last year, for the ordinary qualifications, English, Scotch, and Irish, while 876 passed, no less than 447 were rejected; in other words, a third of the students who presented themselves failed. The proportion of rejections was largest in Scotland. In England there were 283 rejected, while 631 passed; in Scotland 73 were rejected and 83 passed; in Ireland 91 were rejected and 162 passed. Unless, then, the students about to begin their studies do better than their predecessors, there is a certainty that one of every three of them will undergo the painful process of being plucked in the first examinations. To be forewarned is to be forearmed, and our prognostications are only meant to falsify themselves. If every student would resolve that he would not be the third man to be plucked, the discreditable look of these tables would be altered in a year or two. In the *Final Examinations*, the number of candidates who pass are 1140, and those who fail are 285. The largest proportion of rejections is in Scotland. In England 138 fail and 624 pass. In Scotland 104 fail and 282 pass. In Ireland 43 fail and 234 pass. Going a step further, we come to the examinations of the Universities for medical Degrees, and we find that for 1223 who pass 447 fail. In the examinations of the London University 93 fail and 145 pass. In those of the Edinburgh University 104 are rejected and 292 pass. In Aberdeen 33 are rejected and 190 pass. In Glasgow no less than 71 are rejected, while 132 pass. In St. Andrews there is a happy absence of rejections, and all pass. In Dublin 57 fail and 297 pass. In the Queen's 89 are rejected and 156 pass. There were two examinations in 1873 in which the number rejected exceeded the number that passed. Clearly in these cases the examinations must either have been very cruel or the candidates very deficient. In the Preliminary Scientific Examination of the London University 76 were rejected and 67 passed; and in the *first* examination of the Faculty of Glasgow 29 were rejected, while 21 only passed.

There is a growing disposition, for these failures, to blame systems of teaching and modes of examination, as well as if not more than students. We agree with the view that the teaching system is very bad, and that examinations might be made much better tests of the merit of candidates. But there must be idleness or some want of faculty or opportunity on the part of students to account for one in three being arrested at the first examinations for the ordinary licences to practise.

INCREASED knowledge of the nature of morbid processes and of the causes of disease has naturally been accompanied by an ability to recognise the presence of many maladies much earlier in their history than was formerly possible. Diseases which, a generation back, were only suspected when their grasp upon the sufferer was firmly fixed, can now be detected in their insidious onset. To this we must ascribe a large proportion of the increased power which we possess of combating disease. Morbid tendencies are manageable when morbid states are not; and morbid processes can often be checked in their early stage, which, when more advanced, baffle all attempts at arrest or limitation. But the increase in our power over disease is far from commensurate with that increase of knowledge which is its necessary antecedent. We too often have to watch the growth of diseases which develop under our eye, unchecked by all our efforts. Over some affections, even in their commencement, we are all but powerless. In the case of others, moreover, almost all the good we can effect depends on the date at which we are able to detect the presence of the disease. If early, we can do much; if late, little or nothing. And when, in these instances, we have an early opportunity of grappling with the morbid process, and fail to do good, our failures may often be traced to the fact that our treatment—medicinal, hygienic, climatic—was not sufficiently energetic, and that the patient was allowed to remain in the state or circumstances in which his disease originated until it had taken a hold too firm to be dislodged—until irreparable damage had been done. This is the case, notably, in a disease the aspect of which has been rendered far less terrible by early detection—pulmonary consumption. The failure of early treatment in this as in many other diseases is not always to be ascribed to the malignant character of the malady. It is unquestionably due, not unfrequently, much more to the character of the patient than to that of the disease; and it is, we fear, to be attributed sometimes to the character of the practitioner in charge. The patient, on the one hand, from carelessness, from incredulity, often throws away his chances. The early symptoms of trifling and of severe maladies are so often apparently identical that it is difficult to convince patients of the gravity of symptoms which to them seem insignificant—to make them believe how much depends on abstinence from what appears to be innocuous, or on the performance of that which seems to them unnecessary. The very benefit derived from early and cautious measures in one case may frustrate the attempt to enforce them in another. A robust return from a sea voyage may be held to prove how superfluous it was, and the practitioner has thus to contend against his own success. Expatriation for a trifling cough or a troublesome hoarseness seems as disproportionate a measure as it is unpleasant, and all the arguments of the doctor may fail to convince the sufferer of the real need of such a stringent measure. Nor, on the other hand, can the medical practitioner be considered in many cases free from blame. It is almost inconceivable that the loss of a patient, which is involved in a temporary or permanent change of residence, should constitute a motive in deciding on the treatment to be recommended; yet occasionally it seems the only possible explanation of the way in which patients are retained in localities in which they are obviously suffering unnecessarily. Instances have been not unknown in which physicians, even in high position, have kept patients in London long after all hope of corresponding benefit had disappeared; and the country practitioner will suggest that an in-door life is a fair equivalent for a warmer climate. We believe that it is but a very small minority of the members of our profession who would allow such motives, as shortsighted as they are dishonourable, consciously to influence them. But probably a larger number find it difficult to keep their judgment free from an unconscious bias of self-interest, especially when the doctor's interest and the patient's inclination correspond. The distasteful course is urged with insufficient firmness; the patient's objections allowed to have undue weight. To a large proportion of the members of our profession we are glad to believe that these remarks have no application. Every day brings under our notice instances of the disregard of self-interest in the little things of daily professional life as well as in the greater sacrifices for which our profession is above all others nobly distinguished. With all, however, it is not so. Perhaps the entire eradication of such motives, conscious or unconscious, is impossible as long as the present system is maintained, apparently inevitable, of a profession which lives by the presence of disease in the community instead of by its absence; but none ought to enter or remain in such a profession who can let conscience or energy for a moment sleep in their dealings with those who trust life and health to their judgment and their efforts.

IN the recent Brentford Union conference two parties were on their defence before the public—the Local Government Board and the guardians of the union. The conference was certainly a very remarkable one, and brought out the fact, which was to be guessed at before, that the guardians of this said union are a very self-complacent group of gentlemen, not to be moved by "all the Mr. HENLEYS" of the Department. The inadequacy of the accommodation was amply exposed by Mr. HENLEY, by considering the disproportion between the population and its rateable value and the workhouse now as compared with former periods. The proportion of the population relieved as paupers in the four years ending with 1861 was 1 in 25; the proportion in the four years ending 1871 was 1 in 23. Curiously coincident with the increase of pauperism was a progressive increase in the rateable value of the population, which shows, or seems to show, that the pauperism was artificially or improperly created—probably by strikes, as suggested by Mr. HENLEY. With the lapse of time, the workhouse, apart from any increase of pauperism, had become increasingly inadequate to the wants of the population; for, whereas in 1851 the population was 41,325, in 1871 it was 71,933. In the former period there was accommodation for 1 in every 81 of the population; in the latter, for 1 in 127. This explains the way in which beds are packed in the workhouse, as our Commissioner has lately described.

Dr. MOUAT followed, and proceeded, with a proper admixture of "faint praise," to condemn the accommodation for the children—the low-pitched and ill-ventilated rooms, the deficient school accommodation, &c.—as utterly unfitted to supply that maximum amount of air, light, space, and

other cheerful surroundings necessary to depauperise the unfortunate children.

Mr. HENLEY devoted at least half of his speech to a defence of the Local Government Board, and showed that at certain intervals, sometimes five years, sometimes two, sometimes one, the inspectors of that Board wrote letters and gave good advice concerning better hygienic rules and conditions for the children. Nobody disputes that the Local Government Board can write good letters, and can give, if it cannot take, good advice. As we view the matter, the case against it is that it contents itself with doing this, and with seeing its advice ignored and set at nought. If the Local Government Board is not to become a sort of superior board of guardians, it will take advantage of this Brentford business to assert its authority, and to show that it can do something more than write letters and give advice.

On one point we exceedingly regret to see Mr. HENLEY, by saying that the statement that the infants had not been out of the attics for nine months was not strictly correct, and by other remarks, convey the impression that in his opinion they had been wisely treated. We have, on the strength of our own inquiries, to reaffirm the essential truth of Mr. BARTLEY'S statement, in other words, that the children had not been for months in the open air, but had been actually confined all day in a single room, not large, with a sloping roof; and to protest against such treatment of children. Except for the purpose of keeping them rickety and scrofulous paupers, such treatment is absurd; and with an empty unused field in front of the workhouse in which they might occasionally disport themselves, but never have been allowed to do so, it is cruel and not exactly human. If the Local Government Board is to command public respect in this matter, it will see either that the field is used promptly as a site for schools, and temporarily used occasionally as an airing space, or that the children are taken bodily out of the workhouse and "boarded out." This course would relieve the overcrowding of the workhouse, and by placing the children in families it would give them a chance of emerging from pauperism. There could be no practical difficulty in distributing them among the eight or ten parishes of the union, or in securing that they shall be properly supervised.

VARIOUS correspondents of *The Times* are in favour of abolishing the office of coroner, and merging it in that of public prosecutor. We are not surprised to see such propositions when we remember how much many coroners do to give the impression that the office is a useless one, and the work of it done in a slovenly way. But we are far from agreeing with those who would abolish the office of coroner. Rightly filled, as it is by the majority of coroners, the office is a highly useful one, and represents, as has been well said by Mr. EDWARD HERFORD, the immense care which our Constitution takes of the humblest human life. We approve greatly of the jury being parties with the coroner in investigating the cause of death. It is one of the ways in which the common people are taught the great value of human life, and the minor lesson—the nature and value of evidence. Moreover, there are great and obvious objections to a coroner, who is a magistrate, being also a public prosecutor.

In Memoriam: Francis Edmund Anstie.

IT would be difficult to write of FRANCIS EDMUND ANSTIE in these pages without betraying emotion. Hardly yet, indeed, has it been possible fully to realise the fact of his death. Long a member of the staff of THE LANCET, he had won the affectionate regard of his colleagues, and his loss is felt by them with the acuteness of a family grief. An accomplished coadjutor and a warm friend, he commanded alike their respect and esteem, and it will be long before the memories awakened by his vacant place are dulled.

It is impossible, in dwelling upon the rare qualities which characterised Dr. ANSTIE, to separate the personal, which endeared him to his intimate friends, from the intellectual, by which his name became familiar to the profession and the public. He was a physician of the type which is the pride of English physic and the crown of our schools of medicine. Or rather it should be said he was a typical physician of this class. His intellectual culture was not inferior to his strictly medical culture, and this was of the highest. The one, in fact, formed, as it were, the fitting setting for the other. Complete in the technical knowledge of his profession, he brought to its application in actual life that happy combination of scientific and practical acumen, conjoined with a peculiar charm of manner, which make the physician in the truest and best sense of the word. Prompted by a thorough love of medicine, he laboured closely and hard at some of its most complicated problems, and he has left results of enduring value both scientific and practical. His scientific work is characterised by keen insight into the problems with which he dealt, and by a rare appreciation of the light in which his researches should be regarded, as contributing, on the one hand, to existing knowledge of the subjects to which they referred, and, on the other, to the furtherance of investigation. His practical work was distinguished by the skill with which he sought to educe principles of treatment from pathological and physiological data, and rationalised necessary empiricisms. Widely read in the literature of his profession, he brought a richly stored memory to his editorial and literary duties. He was an eager upholder of the dignity of medicine, and an unsparing critic of whatever militated against the good name of the profession within or without its ranks. A clear and incisive style gave power to a pen which, if it were keen, was never unkind, and which has performed an active and influential part in all the great questions which have agitated medicine in its social and political bearings for some years past.

The substantial fruits of Dr. ANSTIE'S labours were about to be gathered when, in the earnest pursuit of a duty, he accidentally received the infection which killed him. Medicine, although rich in sterling workers, can ill afford to lose such a man, and the manner of his death aggravates the painful sense of his loss. It was too costly a life to have been sacrificed prematurely in so pitiful a way.

Medical Annotations.

"Ne quid nimis."

CHANGE OF ADDRESS AND MEDICAL REGISTRATION.

A LETTER will be found in another place setting the question of change of residence, without intimation thereof to the Registrar, in a very serious light. Our correspondent was appointed medical officer of health for Camelford by a large majority. But some "candid friend" represented to the Local Government Board that this gentleman's name was not on the Register, where it had been duly placed in February, 1862, whereupon the Board declines to sanction the appointment. Strictly speaking, the Board has no alternative, as the law requires that the medical officer of health shall be a registered practitioner. Moreover it must be admitted that this gentleman has himself to blame, for a letter intimating a change of address, whenever it was made with any intention of permanency, would have secured the retention of his name on the Register, and this without any cost. It is obviously necessary that the Register be a correct list, even to the address of the person registered, and we must all feel gratified at the determination of the Council to act up to the full powers of the 14th section of the Act in this matter, which empowers "the Registrar to write a letter to any registered person, addressed to him according to his address on the Register, to inquire whether he has ceased to practise, or has changed his residence, and if no answer shall be returned within the period of six months it shall be lawful to erase the name of such person from the Register; provided always that the same may be restored by direction of the General Council, should they think fit to make an order to that effect." Practitioners should notice, however, that restoration is not quite an easy process. It must await a meeting of the Council, or at least of the Executive Committee. Not only so: it was lately resolved by the Executive Committee that no application for restoration to the Register be entertained unless it be accompanied by a certificate of identity from a clergyman, or magistrate, or registered practitioner. It would certainly be rather a hard punishment if, under all the circumstances detailed in his letter, our correspondent should lose his appointment. Probably a statement of facts, with a letter from the Registrar, would satisfy the Local Government Board. But his case may be a warning to others to intimate change of address more promptly. And we may be sure that the Council does not act severely in this matter without good reason. Our latest information is to the effect that another appointment has been made.

GALVANISM IN ATROPHY OF THE OPTIC NERVE.

THE applications of electricity to the treatment of disease are nowadays so multifarious and complicated, and require so much special training for their successful employment, that many practitioners in this country look upon any new method with suspicion, if not with distrust, especially as the results are often disappointing. This is particularly the case with regard to diseases of the eye, in which so much harm may be done by a slight error in its use. The recent successes of M. Lefort in the treatment of opacity of the vitreous, floating bodies, &c., by a weak continued current, will no doubt lead to a trial of his method here for other degenerations of the refractive media. As regards the optic nerve and retina, galvanism has already been tried in this country in cases of anæmia of the optic nerve; we believe Mr. Bader was the first to suggest its use, but in his practice it was not attended by any good results. In a recent note in the "Recueil d'Ophthalmologie," M. Onimus brings forward observations on cases of atrophy of the optic nerve treated with good effects, which are also of importance from the difference in the mode of application, which may have influenced the results. M. Onimus uses only the constant current, limiting the employment of the induced current to the local treatment of muscular paralyses, both on account of its low power of penetration and the greater irritation which it excites. His method consists in the application of the rheophores of a somewhat weak battery over the upper part of the neck, one on each side, so as to act only on the superior cervical ganglion, and thus to influence the intraocular circulation. That it is affected by this as by other methods, is shown by the occurrence of a phosphene or flash at the moment of closing or opening the circuit, and also by the momentary contraction followed by dilatation of the retinal vessels, as seen with the ophthalmoscope. The production of the flash he always avoids by the very gradual withdrawal of the rheophores, as he considers that the sudden nervous disturbance indicated by it is positively injurious in these cases. With regard to the results of this method, M. Onimus very properly distinguishes between cases of atrophy due to cerebral or spinal disease, or associated with ataxic symptoms, and those in which it is primary and uncomplicated. Five instances of success are detailed out of thirty cases of the former class in which it was tried; in the successful cases, the ataxic symptoms were for the most part slight and in an early stage. The benefit obtained was, however, very marked, both as regards definition and extent of the field of vision. The current was usually applied every other day for six or seven weeks. In simple cases much better results may be looked for, especially when, as in one of those related, the defect of vision has occurred consecutively to severe and repeated losses of blood. This case is also of interest incidentally from the cause of the loss of blood. The patient was a woman fifty-seven years of age, who is stated to have menstruated from the age of one month regularly up to the age of twenty, when she became pregnant, the catamenia, however, continuing till the seventh month, and she was confined at term of a healthy child. From the age of twenty-one the catamenia occurred every fortnight, lasting five or six days, and at the age of fifty-four severe metrorrhagia commenced, which lasted for four months, and was finally checked by perchloride of iron. The case seems to be well authenticated, and, we need hardly say, is one of extreme rarity.

THE LATE RAILWAY ACCIDENT.

A MEMBER of the surgical staff of the Norfolk and Norwich Hospital has been good enough to furnish us with a detailed statement of the patients admitted into that institution in consequence of the injuries they had sustained in the late terrible railway catastrophe at Thorpe. We gather that the numbers admitted were 17 males, ranging in age from three to sixty-one years, of whom two died, and 10 females, ranging from eight to forty-nine years of age, of whom one died, nearly the whole being third-class passengers. Our correspondent speaks of the sense of relief that he experienced in passing from the scene of chaos and terror that prevailed at Thorpe, as soon as his services were no longer required there, to the comparatively calm, systematic, and orderly condition of a well-managed hospital. On the arrival of the sufferers the house-surgeon judiciously distributed the cases into the various wards, and these were systematically visited by the surgeon for the week and his colleagues, the nature of the injuries ascertained, and the requisite treatment decided upon. Ample assistance was

rendered by present and past students of the hospital, provision made for relieving the thirst of the sufferers, which was great, and by 4 P.M. all the patients had been made as comfortable as practicable under the circumstances. It was a very serious matter, as may be readily imagined, to have had twenty-seven cases, all more or less serious, suddenly thrown upon an institution already working up to its ordinary capabilities. Too much praise cannot be bestowed upon the hospital administration and the whole staff for the successful way in which they met an emergency equal to that of a military field hospital after an action. A striking feature about the patients was the remarkable calmness displayed by them. After some hours, this quietude, however, passed into a condition of restlessness, and complaints of pain attributable to the bruised and shaken condition of the patients. The relief obtained by opiates, attention to position, with appliances to relieve pressure, under these circumstances, was immense. Nearly all the sufferers were more or less injured about the face, and much disfigured.

ARMY RETIREMENT.

IT has lately been announced that a Royal Commission is about to issue for advising upon a scheme of army retirement. Averse as *The Times* seems to be to the increasing tendency on the part of some of the great departments of the State to delegate to outsiders what should be the act and deed of the Minister himself, it confesses that the period has arrived when this important subject should be dealt with and settled. We earnestly trust that the Army Medical Service will be included with the rest of the army in any forthcoming scheme. The medical officers declare that the late Warrant has inflicted a serious injury on their service; that their duties have been increased, while their rights and privileges have been curtailed; that exceptional treatment, and by no means exceptionally good treatment, has been dealt out to them; and that their service can never be efficient, or the members of it contented, until things have undergone a considerable change for the better. If there be one subject in which they seem to be more interested than another, it is a retirement scheme. Surely some plan might be devised for accelerating promotion in the department beyond that of the fifteen years' service system, and for opening out a better prospect than exists at present for some of the large number of men in the executive ranks getting advanced into the upper and more lucrative ranks of that service. The issue of a Royal Commission for the purpose of advising on a scheme of army retirement offers a favourable opportunity for considering this matter.

DRAINAGE OF LINCOLN.

THE Special Sewerage Committee of the Lincoln Town Council have reported to the Council that they are at present unable to make any report with respect to the sewerage of the city, and on the motion of Mr. Alderman Maltby this report has been received and adopted by the Council. The worthy alderman, in the course of a speech, which, as reported, certainly does not convey a very exalted idea of his competence to discuss sanitary questions, took occasion to deprecate what he conceived to be attempts to bring the city before the public in a worse light than was fairly deserved. No doubt the proverb about the bird fouling its own nest is a good one—where it is applicable. In Lincoln the case seems to be that the nest *is* foul, and the question now turns, not upon the amount of blame attaching to the bird for making it so originally, but upon its culpability in suffering it to remain in that condition. While one party contends that the death-rate of the city is low, and their opponents assert that it is excessively high—a local newspaper actually puts it for a recent week at the rate of forty-six per thousand per annum,—it is of course impossible for a dispassionate onlooker to form a very accurate opinion of the real state of the case. But unimpeachable testimony to the absence of any proper system of drainage in Lincoln has been given and repeated, and the authorities of the city are merely trifling with a grave responsibility when they sit idle under the trumpery pretext for delay that "the concentrated intellect of the country will in time enable the Council to accomplish something more satisfactory than could be done at present." Have Mr. Maltby and his friends never heard of that other old proverb, "Half a loaf is better than no bread"?

THE ALLEGED DEATH FROM CORPORAL PUNISHMENT.

OUR readers will doubtless have perused the accounts in the daily papers of the death of a pupil of St. Mary's School, Marylebone, on August 4th, alleged to have been caused by his having been struck on the head by one of the teachers. It appears from the evidence that on the morning of the receipt of the supposed injury the boy went to school in his usual state of health, that at half-past eleven he was seen to be struck by the teacher, and that shortly afterwards he seemed to be ill, and was conveyed home on his brother's back. The boy complained of pains in the head on arrival, was put to bed and went to sleep, but about 3 o'clock the following morning the attention of his parents was called to his appearance. Medical aid was called in, but he died at 1 P.M. the same day. Mr. F. Lewis, of Upper Gloucester-terrace, who attended the boy, found him suffering from symptoms of compression of the brain, of which he died. On a post-mortem examination, according to the published reports of it, no marks of external injury were discovered, but internally there was some ecchymosis under the left frontal region, and an effusion of blood about the size of a crown-piece, and similar appearances existed on the right side of the head. The lateral ventricles contained an abnormal quantity of serum, and a collection of pus was found in the sac of the arachnoid.

The interest of the case centres in the connexion between these appearances—and especially the presence of pus—and the alleged injury. It seemed to us, on reading the account of the case, so excessively improbable that a quantity of pus—amounting, it is said, to two drachms—could have been formed in twenty-four hours in a previously healthy subject, as the result of a blow, that we were not surprised to find that some hospital surgeon had come forward to state that such an occurrence was quite inconsistent with his experience. This Mr. Christopher Heath has done, and Mr. Julian Evans, M.B., senior physician to the Victoria Hospital for Children, fully concurred with him. The results of the post-mortem examination were in other respects also more consistent with the existence of some old intracranial mischief, which the previous medical history of the boy rendered probable.

MEDICAL CERTIFICATES AT HOSPITALS.

A LETTER from one of the local magistracy, which recently appeared in the *Bristol Times and Mirror*, takes an erroneous view of the duties of the medical officers of public hospitals not uncommon among the "great unpaid," and even among stipendiary magistrates, who ought to know the law better. The magistrate complains that patients of the Bristol Infirmary or the Bristol Hospital cannot obtain a certificate as to the nature and extent of injuries they have received without the payment of a fee of half a guinea, and proceeds to say that he and other magistrates have

failed in administering justice for want of the aforesaid certificate. We have no hesitation in saying that if a fee is demanded by any of the officers of the Bristol charities for a certificate, they are pursuing a practice which is unknown elsewhere, and which has no sanction from either law or custom. Whilst a complainant is so disabled as to be unable to appear before a magistrate, a surgeon is not only justified, but bound, by custom at least, to give a simple certificate to that effect without fee. When the patient is able to appear, however, the medical man stands in a different position, and, if his evidence is required, he should give it *in propriâ personâ*, in order that he may be cross-examined if necessary. Every magistrate has the power to summon the medical officer of a charity, or any other medical practitioner, but must then pay him a fee of half a guinea, and mileage if at a distance; and it is in order to save this that the police authorities sometimes endeavour to obtain a certificate from the medical man. To secure himself against trouble he may give one, when he certainly loses his fee; but there is no more power to compel him to do so than there is to secure the presence of a skilled witness on a subpœna without giving him the fee he demands.

THE METROPOLITAN POLICE AND THE ARMY.

THE late Report of the Commissioner of the Metropolitan Police to the Secretary of State for the Home Department contains some information that might be usefully considered in connexion with army recruiting. The total authorised strength of the metropolitan police force was 9883 at the end of last year. In contrast with all we hear of the army, the class of recruits seeking employment in the police force has been above the average, and they have been enlisted in sufficient numbers to fill all the vacancies. The proportion of old constables in the metropolitan force shows a steady increase, and is a good test of the popularity of the service. Under the new scale of regulations for pensions and gratuities, the principle of which might be worth the consideration of our army reformers, gratuities of one month's pay for each year of service are granted up to fifteen years' service; and pensions are granted to every well conducted man incapacitated for further work after fifteen years' service. All pensions are for life, and a liberal scale, up to full pay for life, has been accorded to men injured in the execution of their duty. These pension regulations are, in the opinion of the Commissioner, framed on a fair and equitable basis, and such as to satisfy the just claims of the men without being unduly burdensome on the Police Fund.

FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE meeting this year has taken place at Lille, and the Association, which has been modelled upon the English Society of the same name, bids fair to emulate its British original. The reception at Lille has not been less cordial than it was formerly at Bordeaux and Lyons, and next year the members are to meet at Nantes. A very friendly interchange of telegrams has taken place between the Association at Belfast and the Lille meeting. Professor Wurtz sent from Lille congratulations to Professor Tyndall at Belfast, dwelling upon the fact that the French Association had been formed upon the British model; and Professor Tyndall answered in the most courteous manner, saying: "The British Association sends cordial thanks and feelings to the French Association and its eminent President."

The medical section has been attended by numerous members, and received more essays and memoirs than the other sections. M. Verneuil, of Paris, was president, Messrs. Donders (of Utrecht) and Warlomont (of Brussels) being honorary presidents.

M. Leudet, in a good paper, pointed out that alcoholism lies at the bottom of many complaints, the diagnosis of which proves difficult. We should ever bear this circumstance in mind. M. Paquet showed that aconitina is useful in the nervous complications of extensive wounds. M. Tripier proved that Heitzmann was in error when he maintained that animals may be rendered rickety by the continuous administration of lactic acid internally, or by injecting it into the veins. The same physician, aided by M. Arloing, mentioned the results of important experiments, showing that the sensibility of the integuments of the hand in man may persist in spite of the section of the nerves of the arm. M. Ollier gave an account of the results to be obtained by the resection of the bones of the foot. The operation is advisable in patients under twenty, but should not be undertaken when the sufferers are above that age. M. Verneuil proved that quinine is very efficacious in that kind of neuralgia which is observed soon after severe wounds. M. Trélat pointed out in his paper that very painful tumours are not always constituted by a congeries of nerves, but may be of a vascular nature. M. Cazin (of Boulogne) brought forward a successful case of Cæsarean section; and several other interesting papers were read in this section. The usual dinners and excursions took place after the meeting, and the members dispersed, much pleased with their visit to Lille.

MORBID ANATOMY OF HYDROPHOBIA.

WE recently called attention to the occurrence of several cases of hydrophobia in New York, in connexion more especially with a fatal case in which the nervous structures had been subjected to microscopical examination by Dr. W. A. Hammond. The scientific value of the results of the post-mortem examination in that case having been called in question, Dr. Hammond has deemed it advisable to discuss the question, in an article illustrated by drawings representing the morbid histology of hydrophobia, in the *New York Medical Journal* for the present month. Dr. Hammond states that he was far from asserting that, in the actual state of our knowledge, the results of his observations could be regarded as essential or constant conditions, nor did he make any pretensions to priority; but he claims that the lesions existed in conjunction with a group of symptoms designated hydrophobia, that they were an important link in aiding us to arrive at a full knowledge of the pathology of the disease, and that they were to a great extent identical with results obtained by Dr. Clifford Allbutt in two cases of the same affection. The last-named observer found the cortical substance of the brain, on microscopical examination, in a state of granular degeneration; and Dr. Hammond found this part of the brain, in the case he describes, in a state of fatty degeneration, which he regards as simply another stage of the same morbid process. Moreover, he discovered numerous extravasations of blood in the medulla, and, in addition, the nuclei of the pneumogastric, hypoglossal, and spinal accessory nerves were in a condition similar to that existing in the cortical substance of the brain; and examination of the upper part of the spinal cord demonstrated the existence of granular and fatty degeneration of the grey substance and nerve-roots, together with nuclear proliferation of the neuroglia-cells of the white substance. These appearances corresponded with the morbid appearances of the same parts observed by Dr. Clifford Allbutt. Considering the symptoms by which hydrophobia is characterised, and the structures in which the affection plays its *rôle*, the discovery of structural changes in these nerve-centres is unquestion-

ably one of scientific interest. Dr. Hammond brought his preparations before the New York Neurological Society, and, as we have said, his article is illustrated by a plate in which the histological changes discovered in his sections are represented. The Society appointed a committee to investigate the causes, prevention, and treatment of hydrophobia.

QUARANTINE AT QUEENSTOWN.

THE commercial world at Queenstown and Cork has been considerably discomfited during the past fortnight by the promulgation of an order imposing upon all vessels arriving from the Mediterranean and Black Seas the provisions of the old Quarantine Act (6 George IV., cap. 71), which virtually detains ships wishing to communicate with, or to discharge at, Queenstown and Cork, until the Customs officers have ascertained that they are provided with a clean bill of health. It may not be known to our readers that the Public Health Act of 1872 does not apply to Ireland, but that in the same year an Act was passed by which the powers hitherto exercised by the Privy Council in respect of the public health were transferred to the Local Government Board of Ireland. We are at a loss to understand why the old quarantine laws have been suddenly put into force at this port, unless, indeed, it be in consequence of the reported existence of the plague at several small towns in the north of Africa, and yellow fever in some parts of the West Indies. Anyhow, the proceeding appears to be somewhat irrational, when we consider that the chief port sanitary authorities in England and Wales have already, with the co-operation of the Customs, instituted an inspection of vessels on arrival from foreign ports, which is practically regarded as an efficient substitute for the old quarantine regulations, and will, as we believe, before long, cause the latter to be expunged entirely from the Maritime Acts. In point of fact, when the Public Health Act is fully initiated in Ireland, and the port sanitary authorities are in fair working order, there is no reason why these authorities should not take the entire sanitary business of the shipping into their own hands, and so relieve the Customs officers from a duty really foreign to the province of a fiscal department. But until port and riparian authorities have marked out exactly and minutely their lines of action, it is plain that they will not be able to walk alone without the aid of the Customs, who have already afforded to medical officers of health, on special occasions, most valuable assistance.

THE CIVILISATION OF WAR.

AN American physician, writing from Paris to a daily contemporary in reference to the International Law Congress, makes some observations of a somewhat exaggerated character it is true, but based on facts that are too apt to be lost sight of in these days. Dr. Bluntschli, a representative at the Brussels Congress, is reported to have said that the Emperor of Russia was desirous of doing for Europe what President Lincoln did for the United States during the Civil War, and so lighten the sufferings of the belligerent nations, and modify the barbarities of the strife. This could only have been uttered, it is alleged, in ignorance of the facts of the case. Mr. Lincoln was no doubt influenced at the outset by a sentiment in which he was but the representative of the feeling of the North; but the struggle was protracted on that account, and it was not until the late president and the nation saw the absolute necessity for prosecuting the war so as to attain the desired end at any sacrifice, that real progress was made; and the Americans are said to have learnt a lesson which will not be forgotten by the present generation at any rate. Should the United States engage in another war, the course would probably be that of Sherman on his march to the sea, and of Grant to Richmond; in the one case "the enemy's country was left a howling wilderness," and in the other the sacrifice of life in order to attain the object was enormous. Again, it is urged, with considerable force, that in a campaign of any length of time ten men die of disease where one dies of wounds. The physician writes from a knowledge of what warfare is, and states that he represents the feeling of the medical staff of both the American armies, and, he feels assured, of that of the officers of the line; and he warns us to give no heed to impracticable philanthropists and humanitarians, but urges, on the grounds of humanity, no less than on those of national and individual interest, that war should not be robbed of the terrors in which it is, and ever must be, clad.

EFFECTS OF DIVISION OF THE AUDITORY SEMICIRCULAR CANALS.

DR. LÖWENBEY gives the results of his experiments on the semicircular canals in Dr. Knapp and Professor Moos's "Archives of Ophthalmology and Otology," vol. iii., 2, p. 26. He believes they prove the following points:—1. That the derangement of motion following division of the semicircular canals is the result of this injury, and not of an accompanying injury to portions of the brain. 2. That the vomiting observed by Professor Czermak in his experiments was the result of an accompanying injury of the cerebellum. 3. That the derangements of motion are the result of irritation of the membranous canals, and not of paralysis. 4. That the irritation of the semicircular canals produces the convulsive movements *reflectively*, without participation of consciousness. Consciousness participates in these effects only in so far as it gives rise to renewed irritation by inciting the animal to voluntary movement. 5. The communication of this reflex excitation from the nerves of the membranous semicircular canals to the motor nerves takes place in the thalamus.

CHEMICAL EXAMINATION OF SACCHARINE URINE.

DR. GEORGE B. FOWLER, Examiner in Physiology, College of Physicians and Surgeons, New York, communicates the results of some recent experiments with Trommer's test for sugar in urine to the *New York Medical Journal*, which have led him to propose the following simple method of procedure:—Take about ten drops of the suspected urine, and to it add two or three drops of a solution of copper sulphate, strength one drachm to an ounce. Then carefully pour in the alkaline solution until a clear blue colour appears. Now boil, and, if sugar be present, the reaction will be perfectly distinct. Dr. Fowler says that Trommer's test possesses advantages over all others, in that it is simple in application, easily made, and does not deteriorate with keeping. But it has long been complained of that it would not react with the urine. This he explains by the fact that boiling urine possesses the property of dissolving the precipitated red copper oxide; but this power is limited, and if sufficient copper sulphate be added the reaction will be satisfactory, hence the above method of procedure suggested by him.

HEALTH OF TOTTENHAM.

THE pleasant suburban village of Tottenham has not for a considerable period enjoyed a reputation for salubrity. The mortality from fever and the preventable diseases generally maintained an exceptionally high rate. We are therefore glad to learn from a report recently issued by the medical officer of health for the district, Dr. Tyndale Watson, that the sanitary state of the parish now shows a decided improvement. The last health return made con-

trasts most favourably with the preceding one. A great deal of the diminution of disease observable is due to the initiation of such simple measures as the ventilation of sewers, the cutting off of doubtful water-supplies, &c. A large measure of the material prosperity of Tottenham is undoubtedly owing to the earnest efforts made for years by a member of our profession and an influential inhabitant, Mr. Hall, in furthering the cause of sanitary progress in the locality. Single-handed he fought for a long time, in the Local Board of Health and out of it, against that malevolent hostility which is so often exhibited when ignorance and vested interests combine to oppose honest endeavours to rectify hygienic evils. Intelligence, however, slowly triumphed, untoward conditions and factors in the causation of zymotic disease were gradually eliminated, and Mr. Hall has now the satisfaction and reward of seeing some fruition to his labours.

MOVEMENT OF ROTATION OF THE HAND.

THE doctrine so long maintained that in rotation of the hand the radius alone rotates round the ulna has recently been contested by Dr. O. Lecomte (*Archives de Médecine*, August, 1874), who maintains that this conclusion has been drawn from dissecting-room experiments, in which all the muscles are stripped off the bones, and the humerus and ulna are held in a fixed position; but this is not the natural condition, and the fixation of the ulna in the movement is contr-indicated by the plainest evidence of the senses. The movement, M. Lecomte observes, is not around a single invariable axis passing through the middle finger, but this axis may be displaced either inwards or outwards, and may thus pass through one of the other fingers or intermediate spaces, and *both* the bones of the forearm participate in the movement. The play of articulation is very complex in the act of rotation, the humero-cubital articulation in particular having an important *rôle*. The ulna executes a spiral movement of torsion on the trochlea of the humerus, which may vary in extent, but which is present in the different kinds of rotation. At the wrist the movement is quite peculiar, the surfaces of the radio-cubital articulation gliding in opposite directions over each other to an exactly equal and corresponding extent. The system of the rotator muscles of the hand comprises four muscles; two for the radius and two for the ulna. Each of these bones has a pronator and a supinator attached to it. There is a radial pronator (the pronator teres), a radial supinator (the supinator brevis), an ulnar pronator (the anconeus), and an ulnar supinator (the pronator quadratus).

SHOULDER-PADS AND KICKING RIFLES.

A MILITARY doctor is a man who has to put his hand to all sorts of work. He may at any time find himself in some remote and isolated position where he has to act not only as surgeon, physician, or accoucheur, but as a sanitarian, analyst, statist, and what not. And, to do the army doctors justice, they are much given to discovering expedients and designing practical "dodges" to meet this or that emergency. We have all heard a good deal of late of the alleged defects of the Martini-Henry rifle, which, in addition to being relatively heavy, "kicks" like an old cavalry horse. The effect of this—on recruits and young soldiers especially—may be readily imagined, although the arm, as to accuracy and rapidity, is said to give satisfaction. In a recent number of the *Indian Medical Gazette*, Surgeon J. Duke, describes a little invention of his which was suggested by the frequent occurrence of cases of bruised shoulder from the recoil of the Enfield rifle among the Sepoys during the annual course of musketry. He refers to some cases in which the bruising and consequent tenderness were so great as to incapacitate the soldiers from duty. To overcome the effect of the recoil, Surgeon Duke has invented a pad of cotton-wool covered with white linen, weighing one ounce and seven drachms, which can be adjusted and worn outside or underneath the coat. In addition, Surgeon Duke has, at the recommendation of an officer of his regiment, made a pad or "shoe," weighing about an ounce and a half, of spongio-piline, covered with thick black drill cloth, to be applied to the end of the rifle. Captain Tulloch, a marksman of considerable experience, made a trial of the "pad," when testing the regimental rifles, and reported the success of the experiment as complete. We much doubt whether any proposed addition to the soldiers' equipment will meet with approval, but Surgeon Duke's device shows a simple and practical way of attaining the object in view, and some rifle shots in this country may be inclined to give it a trial.

THE FORM OF THE CAVITY OF THE UTERUS.

HAGEMANN (*Archiv. f. Gynæcol.*, Band v.) has made a series of plaster-of-Paris casts of the interior of the uterus, and finds that the form of the uterus in a new-born child is distinctly bicornuate, a crista media being still visible as a remains of it in the virgin at puberty. Women who have had children and old people have still some indication of it in a marked prominence of the walls at the point of entry of the Fallopian tubes. In childhood the uterus is very narrow from before backward. In multipara the transverse diameter, just above the orificium internum, is very considerable. On the other hand, in virgins the cervical canal is half the whole length of the uterus. The cervical canal is widest near its centre. The cristæ of the plicæ palmatæ are situated the one in front and to the left, the other behind and to the right. The retrogressive metamorphosis of the uterus after birth does not affect the whole uterus equally, but chiefly the placentary region.

THE HOP-PICKERS.

IT is satisfactory to know that some of the rural sanitary authorities in Kent, acting upon the advice of their medical officer of health, and strengthened in their proceedings by the 45th section of the Sanitary Laws Amendment Act, have issued special bye-laws to regulate the kind of accommodation to be afforded to hop-pickers. The Cranbrook authorities have issued a special notice epitomising the arrangements that should be made in the huts or tents provided, the simplest sort of ventilation, the quantity of water required, and other particulars, which, if acted upon and faithfully carried out, should ameliorate the physical and moral condition of the workers very considerably.

THE NOTTINGHAM CORONER AND PHILADELPHIAN DOCTORS.

A VERY proper inquiry has been held by the Coroner of Nottingham into the case of Elizabeth Ann Elliss, who had the misfortune to be attended by an American—or, to speak more accurately, a Philadelphian—doctor, John Wilson, until she was totally unconscious and dying, when Dr. Snell was called in. According to Philadelphian principles the patient had erysipelas; according to Dr. Snell, the indications of renal disease were so plain that only a Philadelphian doctor would have overlooked them. The jury passed the following verdict:—"That deceased died from disease of the kidneys, and the jury regret that proper medical advice was not obtained earlier." The coroner addressed Mr. Wilson in very clear terms, told him that he had no right to practise as a medical man, and that he (the coroner) would hold an

inquest in every case in which death occurred under his treatment. The woman who fetched Wilson in said she saw "Dr. Wilson" over the door, and so was led to ask him to attend. This is the real offence of Wilson—using a title implying registration and proper medical qualification on the strength of a Philadelphian certificate. We should advise him to call himself a herbalist, and to use less virulent substances than green hellebore. The public of Nottingham must feel grateful to the coroner for his conduct in this matter.

THE PRESSURE OF THE SALIVA IN THE GLANDULA SUBMAXILLARIS.

THE pressure of the salivary secretion in the duct of the submaxillary gland has long been known to be remarkably high. Hering has investigated the reason of this (*Wien. Sitz.*, 1872, iii., 2), and finds it is due to the circumstance that this gland secretes a colloidal substance having a remarkably high endosmotic equivalent. This colloid substance is probably mucin. The only difficulty is to explain the rapid formation of this under nervous influence; but the difficulty is only apparent, since a very delicate membrane alone intervenes between the mucin contained in the cells and the interior of the tubuli of the gland.

THE PATRIOTIC FUND SCHOOL.

THE attention which has been called to the state of the Patriotic Fund Schools, by the lamented death of Dr. Anstie, will certainly demand a searching inquiry into their state and government, and into the remote causes of the illnesses which have prevailed there. We hope that this inquiry will without delay be instituted by the Local Government Board, which is better fitted than any private body to discharge what has become an imperative public duty.

THE advocates of cremation, conscious, as we suppose, of the goodness of their cause, are disposed to proceed with more zeal than discretion. A meeting of the West Hartlepool Improvement Commissioners was held on the 8th inst. for the purpose of making arrangements for enlarging the cemetery of that town; and Mr. Turnbull, an enterprising member thereof, took the subject by the horns, and gave notice of a motion in favour of cremation. But the wives and mothers located in this flourishing port banded together, got up a petition, besieged the Council Chamber, and, headed by one Mrs. Peart, gave the rash Commissioner an unpleasantly warm reception. The motion found no seconder, and fell to the ground, and it is reported that Mr. Turnbull narrowly escaped the same fate from the town cliff.

L'Union Médicale quotes, from the *Boston Medical Journal*, the case of a farmer whose inguinal hernia became strangulated after having been of easy reduction for eight years. The return of the bowel was impeded by a hard body which was plainly felt in the tumour. The account does not say that any operation was performed, though the patient had been narcotised. The man died, and it was found that the obstruction was owing to a bone, two inches long, situated above Poupart's ligament. It is strange that kelotomy was not had recourse to, but it may be surmised that some stringent reasons existed forbidding the operation.

SURGEON-MAJOR PORTER, Assistant-Professor of Military Surgery at Netley, has been presented with the Bronze Cross by the French Societies for Aid to the Sick and Wounded of Armies, in recognition of his services during the late Franco-Prussian war.

ON Monday, the 24th inst., and the five following days, a gala and bazaar will be held in Stanley Park, Liverpool, in aid of the funds of the Stanley Hospital. His Royal Highness the Duke of Edinburgh will, it is expected, honour the proceedings with his presence. Every effort is, we understand, being made to ensure pecuniary success, and among the novelties of the occasion we notice that the firm of Messrs. Burroughs and Watts, the eminent billiard-table makers, have presented a beautiful miniature billiard-table, to be sold or drawn for, in aid of the hospital funds.

THE movement for a monument to Liebig is making progress in Germany. Some £7500 is the estimated cost, and of this nearly two-thirds have been subscribed—the far greater part, of course, by Germany. England, numerous and deep as are her obligations to the father of agricultural chemistry, stands very low on the subscription list, being, in fact, outstripped by Italy, who, thanks to her *rapprochement* with Germany, and to the scientific resuscitation encouraged by her *savant* and statesman, Quintino Sella, comes next as a subscriber to Germany herself.

LORD CARLINGFORD, as President of the West of England Sanatorium at Weston-super-Mare, delivered an address in which he urged the co-operation of the public with the local sanitary officers and inspectors. By so doing they would in a more or less degree contribute to lessen the diseases which decimated the population and crowded the hospitals; while institutions like the West of England Sanatorium would always be needed, such action on the part of the public would lighten the pressure on other resources.

RELIEF to the sick and wounded in war has always been a popular movement in Russia. The Society organised with that object at St. Petersburg has amassed nearly seventeen millions of roubles. For the first quarter of the present year its expenses for *matériel* and the training of ambulance attendants amounted to 800,000 roubles, while its income was considerably in excess of that sum. What with annual subscriptions and donations, the receipts of the society amount to several millions of roubles yearly.

ON Tuesday last Mr. James Prime-Bartlett was presented with a testimonial consisting of a handsome silver biscuit jar and butter dish, on the occasion of his resigning the post of Assistant Resident Medical Officer at the Hospital for Consumption, Brompton. The testimonial was presented publicly, and was accompanied by an address signed by the nurses and servants of the institution, thanking him for his attention during the five years he had held his post, and wishing him every success in private practice.

THE Manchester and Salford Sanitary Association have just issued some excellent instructions for the avoidance and prevention of enteric fever and scarlatina, and which are intended for general distribution. We have often commended the activity which this Association displays in its self-imposed duty of limiting the progress of disease, and are glad to welcome this new evidence of its vitality. We should like to see many more such associations throughout the country.

AN epidemic of typhoid fever is reported from the hamlet of Brierly Lane, Bradford. Seventy persons have already been attacked with the disease. Dr. Thorne Thorne, one of the Local Government Board inspectors, who has been down in the locality inquiring into the conditions of the outbreak, gives evidence strongly in favour of the theory of milk contamination.

THE authorities of Lancashire are still taking time to consider the propriety of appointing an analyst for the county. A report just issued recommends delay, on account of the evidence recently adduced before the Select Committee of the House of Commons, which evidence, the report recites, "is calculated to relieve the public from exaggerated apprehensions of the existence of deleterious ingredients in every article of food and drink."

THE death of Lady Augusta Milbank, the sister of the Duke of Cleveland, which occurred at Barningham-park a few days ago, deserves a word of notice. Her ladyship, who was over seventy years of age, was seized with an attack of measles, from which she gradually succumbed. Measles terminating fatally in the aged is so rare that the fact we have stated must be of interest to the profession and the public.

IN London last week 1209 deaths were registered, including 7 from measles, 87 from scarlet fever, 8 from diphtheria, 13 from whooping-cough, 23 from different forms of fever, 75 from diarrhœa. No death from small-pox was recorded. Of continental cities, Rome and Breslau have of late been the most unhealthy. The high death-rate which prevailed so long in Berlin is now rapidly diminishing.

THERE appears to be a large amount of disease now prevalent at Malta. The last issue of vital statistics for Malta and Gozo, which we have just received, shows the very high annual death-rate of 52·73 per thousand. In one fortnight no less than 102 deaths were registered from "enteritis." In a corresponding period of 1873 the death-rate was only 22·73.

THE French Government offer a prize of £12,000 for the discovery of an effectual means of destroying the vine scourge, *phylloxera*; and a committee has been appointed to regulate the mode of competing, and possibly to award the prize. Voluntary subscriptions on the part of departments, parishes, companies, or private persons, will be allowed to increase the value of the prize.

THERE has been for some time past a great falling off of medical students at the University of Berlin. One professor alone has fewer pupils by 100 than he had last year. The Universities of Leipzig and Göttingen now precede that of the capital city as regards the number of medical *alumni*. In Göttingen alone there are over 1000 medical students.

BELGIUM has just lost the able and accomplished secretary of her Royal Academy of Medicine, Dr. J. Romuald Marinus, titular member of that body, and officer of the Order of Leopold. The deceased gentleman was in his seventy-fifth year.

WE understand that Mr. Edward Warren, of Cairo, has been promoted by His Highness the Khedive of Egypt to the position of Chief Surgeon of the Egyptian Army. Mr. Warren's promotion in the East has been exceptionally rapid.

A BARQUE arrived in the West India Docks at the end of last week, from Mauritius, with several cases of scurvy on board, and an official inquiry thereupon has been ordered by the Marine Department of the Board of Trade.

DR. HAMBERG, of Stockholm, has lately been engaged in making a series of experiments on the poisons exhaled by certain wall-papers. As with ourselves, arsenic is the poison most to be dreaded.

IN a sermon preached on Sunday last at Chatburn, the Bishop of Manchester gave the weight of his authority in favour of cremation as a means of disposing of our dead. The practice of burning the body would not in his opinion in any way interfere with the doctrine of the resurrection. Dr. Fraser's sermon stands out in favourable contrast with one recently made by another divine, and to which we at the time alluded.

A MEETING of medical practitioners was convened last week to take into consideration the alleged need for reforming the out-patient system of relief at the London hospitals. A resolution in favour of curtailing out-patient departments, proposed by Dr. Ford Anderson and seconded by Dr. Joseph Rogers, was unanimously carried.

FOR the Professorship of Geology and Comparative Anatomy, vacant in University College, London, the following gentlemen are candidates: Mr. E. Ray Lankester, Dr. J. Murie, and Mr. H. Seeley.

WE learn of a novel form of adulteration practised in Germany. Brewers in that country are said to be in the habit of substituting prussic acid for hops in their beer.

DURING the month of August scarlatina was very prevalent and fatal in Scotland; diarrhœa, the next most fatal epidemic, also caused a large mortality.

TO-DAY (Friday) the German Natural History Association opens its annual meeting at Breslau, with a public banquet given by the municipality.

THE RAILWAY ACCIDENT NEAR NORWICH.

Communicated by Mr. THOS. W. CROSSE, F.R.C.S.,
Surgeon to the Norwich Hospital.

I ARRIVED at the hospital at about 2 A.M. on the morning following the accident, finding my services no longer needed at Thorpe. It was a relief to pass from the chaos and terror there reigning to the calm atmosphere of a well-managed institution, where everything appeared, by comparison, to be in order, everybody being in his proper place, and capable, as well as willing, to attend to the directions given. Many patients had already been received, others continued to arrive, and more were expected; but none had to wait for attention, and each was dealt with quietly, and with full respect to the necessities of the case.

The presence and decision of my colleagues (Dr. Bateman, Mr. Firth, Mr. Williams, and Dr. Beverley) left me but little personally to attend to, except to direct, a duty which devolved upon me as surgeon for the week. I wish to state the plan I adopted—first, because I believe it best in all cases of emergency to proceed upon a system, and, next, because what was done answered, as far as I am able to judge, the purpose.

The house-surgeon, Mr. Baumgartner, had judiciously distributed the cases into various wards. These we visited systematically, ascertained the nature of the injuries, and agreed upon the requisite treatment. Only one patient required any serious operation (after one compound dislocation of the ankle-joint, with displaced astragalus and hæmorrhage, had been seen to), and whilst this was being performed, one party was told off to look after the accidents on the male, and another after those on the female side of the house. There was ample assistance tendered for this purpose by both present and old students, who seemed to appear as if by instinct, and rendered most valuable aid. I am sure I may say that by 4 P.M. all the patients had been made as easy as their circumstances permitted, and had been properly provided for. Two very severe cases, received whilst thus occupied, were placed upon beds on the floor in the physician's room,

being considered in too hopeless a condition to need removal to a ward. These men both died (Betts and Upton).

Hot tea was plentifully supplied, and the thirst of the sufferers, which was great, relieved according to their wishes.

It is a great comfort to me to feel how equal the hospital was to the emergency. To have to treat twenty-seven cases, more or less serious, suddenly thrown upon an institution always full, was a good test of its capabilities, and it came well out of it. Splints, bandages, and various appliances that were needed, appeared at command and with very little delay, everything being done with a serious attention and despatch that was striking.

So much for the first night. Let me now briefly state what struck me as to the general and surgical features of the catastrophe.

There was a remarkable calmness about all the patients, almost painful to witness. The examination of broken limbs was submitted to with a resignation and freedom from complaint that is very unusual, and it conveyed to me the impression, even when the injury was evidently slight, that the sufferer thought badly of his chances of recovery. After some hours (varying from twelve to twenty-four) had passed, this quietude was changed into restlessness and complaint, attributable chiefly to stiffness and contusions of various parts of the body. Everyone seemed to have pain in the back and in the belly, which was relieved in some instances by pillows, and in most by fomentations.

Very few were sick, except the children with head injuries; all passed their water soon after admission, after which the function became suspended for twelve hours, returning, however, again, for in no instance was the catheter required.

I did not notice much that could be attributed to shock, unless the calmness of demeanour and dysuria can be thus explained. The extremities in nearly all cases were cold, it is true, but the night was wet and chilly, and most had been exposed to these influences.

I think in nearly every case on the following night (Friday) I ordered an opiate—twenty minims of solution of morphia—and with the very best results. It is impossible to overrate the good effects which this exercised in every case. The dose was repeated according to its effects, and all who had it were greatly improved by it, and were most grateful for its administration.

Stimulants were very cautiously given, and but few seemed to need them save in small quantities. Brandy and port wine were selected, and the females needed them much more than the males.

The thirst, at first so great, soon subsided, and seemed to be best cured by giving what was asked for to drink.

In nearly all cases aperients have been necessary, and the tranquillity of mind which supervened upon the action of the bowels, contrasted with the anxiety which preceded it (especially if the medicine happened to be slow in its manifestations), was very remarkable; hope of recovery, I am sure in many instances, set in from that moment.

The great pain which accompanied the contusions was very striking, the tenderness and suffering were most severe, and such as I have never seen before, especially so in the legs, more particularly if unattended with fracture or wound. In many cases vesication appeared several days after the accident. In all the greatest relief was given by warm fomentations and attention to position. Evaporating lotions were useless.

All the sufferers were more or less injured about the head and face, and were greatly disfigured. In one case only were the upper extremities hurt, and here the upper arm had sustained a bad compound fracture, and had to be amputated. This gentleman was travelling in a second-class carriage, and, like most of the others, was asleep when the accident happened. I believe nearly all the sufferers received into the hospital were third-class passengers.

The pulse in every case quickened after the first twenty-four hours, and ran up to 120, and the temperature also rose, in one case to 104°; but this condition has now subsided, and all the patients may be said to be at the present time progressing favourably. The following is a list of persons injured from fractures, contusions, and scalds:—Seventeen males, whose ages range from three to sixty-one, and of whom two died; and ten females, varying in age from eight to forty-nine, and of whom one died.

Correspondence.

"Audi alteram partem."

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

To the Editor of THE LANCET.

SIR,—I am a member of the British Association for the Advancement of Science of forty-two years' standing; and, after several years' absence from its meetings, having attended that at Belfast, I think that some of your readers may be interested to hear the experience and impressions of a veteran's visit to this peripatetic school of philosophers.

I may mention that for several years I attended its meetings regularly; contributed many papers and reports; have always been a member of the General Committee, on several occasions have been vice-president of a section, and for a time was member of the Council. But during the last thirty years the engrossing occupations of a very busy professional life have rendered my visits to the Association few and far between; and the last visit was saddened indeed by the loss of so many old friends who used to be the leading spirits of the Association—Buckland, Sedgwick, Whewell, Conybeare, Taylor, Graham, Murchison, all gone; now followed by Phillips, the very life and mainspring of the institution. Their places are taken by others, good men, no doubt; but I find myself unknown to most of them, and I am not even paid the compliment of having my name on a committee: so that when, as an outsider, I apply to have my name entered for the purpose of exhibiting to the section of Zoology and Botany a series of preparations of seaweeds from Jersey (unequalled in brightness of colour and in display of minute structure), I find myself treated as a Palæozoon, and consigned to the museum; and it was not until after application to the president of the section, Dr. Hooker, who, as president also of the Royal Society, of course knew me, that I got the opportunity of directing the notice of the section to these beautiful specimens, prepared by a paraplegic lady, Miss E. Dyke Poore, 31, Roseville-street, Jersey. They commanded general admiration; and the president expressed the thanks of the section to the lady for her successful endeavours to preserve and display the wonderful beauties of this department of vegetable nature.

I pass from personal matters to the general working of the Association. In the establishment of the practice of giving addresses, both general and sectional, I think a move has been made in the right direction, and several delivered on this occasion were either valuable summaries of the present state of their respective branches of science, or presented important contributions of new facts. Dr. Tyndall's address, although received with much *éclat*, can hardly be placed in either of these categories. Publicly applauded, it was privately discussed with unmerciful criticism, and with an unfavourable result from the great majority of those with whom I conversed. In my opinion he had wandered out of his element and out of his depth into the ideal and fantastic regions of ancient philosophy, so called, in which men, instead of studying and so interpreting Nature through facts, sought in their own minds systems spun from the cobwebs of their own fancy, to account for the phenomena of mind and matter.

Even Professor Huxley seemed to be partially led away by a similar passion for speculation, when, in his most interesting and masterly exposition of the nature of automatic movements of animals, he delights to expatiate on the happy conjectures of Descartes, and does not even mention Marshall Hall, who by positive experiment first established the reality of those reflex actions on which automatism depends. When speculation is thus exalted above experiment, it is not surprising that many should raise an alarm against "logical consequences and dangerous tendencies," and an outcry set up against materialistic science. For my own part, I see so little resemblance between the atomic doctrines of the present day and the fanciful molecules and atoms of Democritus and Lucretius, that they need carry no conclusions in common. Religion and science are wholly distinct, the one being founded on faith in divine revelation, the other on human observation and reason.

The addresses of Professor Redfern in the department of Anatomy and Physiology, and that of Dr. Hooker in that of Zoology and Botany, were both admirable, and strictly within the limits, and marking the progress, of their respective sciences. Professor Redfern adverted to the advances made during the last thirty years in our knowledge of the nature of textural nutrition. The cell-theory of Schwann and Schleiden transferred the process from the body, as a whole, to its constituent molecules; whilst more recent researches, although substantiating the principle of molecular life and proliferation, traced it to a protoplasmic matter independent of cells, these being frequent, but not essential parts in the process. This change of opinion is the more interesting to myself, because as long as thirty years ago, in observations on the white blood-corpuscles as representatives of the plasma, I first described them as little lumps of jelly, adhering to the walls of the blood-vessels, within and without, and not possessing essentially a cellular structure. Shortly afterwards Dr. W. Addison made the remarkable discovery that these corpuscles pass bodily through the walls of the vessels—a fact which, although reaffirmed by Dr. Waller, was not generally received until rediscovered by Professor Cohnheim within the last seven years. Subsequently, the wonderful amœboid and migratory properties of these corpuscles have been more fully made out. And here I would emphatically point out that it is not pus-cells, or white cells, or cells at all, that have this vital power of migration, but morsels of protoplasmic jelly, and these only when alive; for, as proved by Graham, and noticed in Professor Redfern's address, dead colloids, even in solution, will not pass through membranes, where crystalloids pass freely. Professor Redfern did not refer to the application of these fundamental doctrines to pathology, which I have endeavoured to open up, and which promises a rich field for future investigators. He adverted to several recent researches proving the passage of nerve-fibrils beyond basement membrane, so as to come in actual contact with objects of taste and smell; and, according to Pflüger, the same occurs in the secreting epithelium of the salivary gland. Altogether, the last fifty years have been remarkable for the great advances made in physiology, chiefly through aids afforded by physical science.

The address of Dr. Hooker, although on a limited subject, "The Carnivorous Habits of certain Plants," was replete with most curious and interesting facts, which establish clearly that certain genera, including dionæa, drosera, sarracenia, darlingtonia, and nepenthe, are distinctly and designedly carnivorous. They present various modifications of structure, comprising honey glands to attract insects, and either contractile leaves to close on them, or a narrow-mouthed cup or pitcher beset with reverse hairs to prevent their escape; an acid fluid by which they are digested, and an absorbent apparatus by which they are appropriated to the nourishment of the plant. I am sure that many will agree with Dr. Hooker in his concluding remark, that these evidences of intelligent design of correlation of organs and functions between the several kingdoms of nature, transcend in wonder and interest those of evolution and origin of species.

Equally marvellous and suggestive of infinite wisdom in design were the interesting observations of Sir John Lubbock, proving the dependence and mutual adaptations of structure between flowers and insects; and this not merely for the simple purposes of fertilisation, direct and cross, but also for the improvement of the species on the principle of selection; the brightest colours, the strongest scents, and the sweetest honey attracting most certainly and freely the visits of insects, and thus making most sure the fecundity of the best individuals.

All this was most interesting and instructive, and one cannot help remarking how it enlarges the theme of Watts's hymn, quoted by Dr. Hooker in moving the vote of thanks to Sir J. Lubbock, "How doth the little busy bee," &c.

The work of the sections was also for the most part abundant and instructive, and the attendance often crowded. But in the appointment of officers of sections, and in the publications of addresses of members on their arrival, there was great irregularity. Several names appeared in the committee lists although the members were not present at the meeting; and during the first three days of the meeting no new list appeared from 8 A.M. on Wednesday, the 19th, till late on Friday afternoon. The British Association is a most useful and important institution, and it is a pity that its efficiency and the comfort of its members should be so much spoiled by bad management.

I am, Sir, your obedient servant,

C. J. B. WILLIAMS, M.D., F.R.S.

Upper Brook-street, Sept. 1874.

THE QUEEN'S UNIVERSITY IN IRELAND.

To the Editor of THE LANCET.

SIR,—I hope that the discussion on this young but flourishing University will lead to the institution of a Bachelor's degree, as is done in all our other universities, and in the Faculty of Law at Queen's. This would be much more satisfactory to many students than the present system of making the Doctorate the only medical degree, and would also be of pecuniary benefit to the University. It is hardly fair to the LL.D.s that men so much younger than themselves should be put on the same university standing.

What I suggest is that the M.B. of three years' standing who chooses to graduate as M.D. should be required to write an extempore dissertation on some medical or scientific subject, and also to pass in either logic or moral philosophy. Speaking as a student, I would willingly accede to this arrangement; and, indeed, until I am twenty-five or so, I should prefer being only a Bachelor. Not only so, but those of our graduates who have obtained hospital surgeoncies in London have been obliged to conform to the custom of ignoring their M.D. degrees; while, if the previous degree had existed at Queen's and at Glasgow, they could have used them. The Scotch universities have now each a Bachelor's degree. I trust this letter may catch the eye of Sir D. Corrigan or some other influential member of the Senate, and that this desirable state of things may be speedily initiated.

I am, Sir, your obedient servant,

September 7th, 1874. ERIN.

BIRMINGHAM.

(From our own Correspondent.)

THE health of Birmingham is yet far from the standard of excellence at which it formerly stood. Small-pox still continues among us. In the week ending Aug. 22nd 72 new cases were reported, and 80 cases remained in the infirmary, while in that ending Aug. 29th 89 new cases were reported, and 58 remained in hospital.

The Corporation have now taken possession of the buildings hitherto occupied by the guardians, and have agreed to provide accommodation for all pauper small-pox patients upon payment of 15s. per head per week, the power to determine whether patients are of the pauper class or not being left to the guardians. The land and premises, although in close proximity to the workhouse, are to be kept in a state of complete isolation from it, and a separate approach to the small-pox wards is to be provided.

The advantages of isolation in the treatment of infectious diseases have recently been seen at Dudley, where the prompt action of Dr. Timmins, the medical officer of health, in at once adopting measures for the removal to the workhouse infirmary of two cases of small-pox, which had just been imported from Birmingham, succeeded in preventing the disease extending beyond the family that was attacked. Dudley, as well as Birmingham and all other large towns, ought, however, at once to provide a suitable hospital for non-paupers affected with zymotic diseases.

Dr. Ballard's sweeping condemnation of the sanitary condition of Bilston has caused great annoyance to the commissioners. Their justification of their sanitary exploits is not of much avail, however, when they admit that there are upwards of 700 houses still unprovided with water, that a portion of the town is still unsewered, and that the night-soil and ashes are left to be removed by the house-owners themselves, instead of by the sanitary committee.

A remarkable case of death from hydrophobia in a boy aged thirteen has occurred here, caused by the bite of a cat five

weeks previously. The boy attended at the General Hospital as an out-patient with a bite on the arm until the 24th ult., when he was discharged cured. On the 31st he went to a pic-nic in the country, and while on the way complained of great pain in the arm, and of feeling very ill. Next morning he was seen by Dr. Poncia, who attended him up to the time of his decease, and who gave as his opinion at the inquest that the cause of death was hydrophobia, caused by the bite of a cat.

An unfortunate discussion has been going on in the Birmingham newspapers between several of the surgeons of the Birmingham and Midland Counties Eye Hospital as to the desirability of removing that institution from its present site in consequence of its being unhealthy. Such discussions are, on all grounds, much better conducted in professional publications than in the local daily papers.

A highly creditable addition to our local medical literature has been made by the publication of Dr. Balthazar Foster's "Clinical Medicine." It consists of a collection of essays and lectures, which have already appeared in the pages of THE LANCET and other medical periodicals, and many of them are well worthy of reperusal. Dr. Foster's remarks on the treatment of ulcer of the stomach by complete rest of that organ, on the advantage of etherised cod-liver oil in phthisis, and on the use of the sphygmograph and cardiograph in the study of diseases of the heart and great vessels, are exceedingly valuable and practical.

The introductory clinical address of the united General and Queen's Hospitals will this year be given on Wednesday, Oct. 7th, by Mr. Wilders, in the operating theatre of the latter institution, and the medical staffs of the two hospitals have resolved to give on the following day a complimentary dinner to Dr. Bell Fletcher in recognition of his services as chairman of the Birmingham Clinical Board since its formation.

Birmingham, Sept. 7th, 1874.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

WITH regard to the late attempted triple murder and suicide here, the unfortunate woman Lewis and the others wounded by her are doing well. Yesterday morning, at a private sitting held in Newcastle Gaol, she was again charged with having murdered Charles Raven, and attempting to murder her husband, Leverie Lewis, Anna Maria Raven, and Geo. Langley; and after a short consultation it was agreed, on the joint certificates of Drs. Hardcastle and Gibson, to send the prisoner to the Asylum until the Assizes.

The following narrative has been going the round of our local papers. I may mention that, from inquiries which I have made, I believe the account to be substantially correct, and that the lady's unfortunate end produced a great sensation in the Hartlepools. The legend of the Old Oak Chest, in fact, has been as nearly as possible repeated at Hartlepool. Mr. Kelk, cashier to the building firm of Whitby and Co., recently married, had invited a party of friends to his house. His young wife, in her anxiety to get out of the hot air, ventured upstairs, and, seeing a small closet with a ventilator, she entered to fasten it, when the current of air closed the door. In vain she called to the servants, although she could hear the door-bell ring and the visitors enter. All the other parts of the dwelling and the ground were searched, none suspecting that the imprisoned lady was in the roof of the house. One visitor suggested that there might be an old oak chest with a secret spring, and this gave a clue to the closet, and, when at last found, Mrs Kelk was seriously ill, and hysterical. Violent epileptic fits followed, and the shock being more than the nervous system could sustain, death shortly put an end to her sufferings.

The high rate of mortality prevailing at present in Newcastle has caused much uneasiness here, and the papers, and the discussions in the Town Council, evince the concern with which the state of things is viewed by the public. The last return of the Registrar-General shows a death-rate of 31 per thousand; nor is this exceptional, for the mortality has been high for several weeks. Many suggestions are made of more or less value to counteract this. But one thing is certain: the water-supply of Newcastle and Gateshead is deficient in quantity and inferior in quality. The water company's officials no doubt do all in their power to meet our wants. But I believe, with the sources at their command, it is impossible for them to give us anything like an adequate supply; and as for quality, we must just like it as it comes, which is sometimes as if from a peat moss. I do not suppose we shall have abundant and pure water until the supply ceases to be a monopoly, and is taken into hand by our Corporation. It was indeed stated at a late meeting that a scientific member of our Town Council (Mr. Newell) had devised a plan, upon which he was busy at work, to have the supply brought to our Tyneside towns from Ullswater Lake. Such a scheme would be worthy of the age if carried into successful execution, and it is to be hoped that there will be found (remembering what has been done at Glasgow and Dublin) no insuperable engineering or financial obstacles. It behoves our authorities to lose no time about this matter, as delay may be death to hundreds. Already we hear that a bad form of epidemic fever is closing around us, for within the last few weeks there has been a pretty smart outbreak of typhoid fever at North Seaton, situated about ten miles from Newcastle. The village will contain a population of about 2000, and it would appear from the newspaper reports of the epidemic that the drainage is in a very faulty state, and the supply of pure water very deficient. The sole water-supply the inhabitants possessed was from a well situated upon the banks of the river, and as loud complaints were made respecting its impurity, an analysis was made, which resulted in the well being closed for a short time. Another source was opened, and now the inhabitants complain of the water being strongly impregnated with salt, caused by each rising of the tide. The fever has been abating lately, but at one time about forty cases were under treatment. Fortunately the deaths have been few. The population is principally mining, and the North Seaton Coal Company have been distributing with an unsparing hand disinfectants, and had also commenced operations for a new water-supply. There has also been an alarming outbreak of the disease at Hebburn, a village on the south bank of the Tyne, about three miles from here. At a meeting of the local board, Dr. Mitchell, the medical officer of health, the other day reported that typhoid fever of a very bad type was prevalent in the district. He blamed the state of the privies and the habits of the people. About thirty cases were at present under treatment, and eight fatal cases had occurred. The inspector of nuisances said he had gone to disinfect a house, and he had found nothing but a corpse in it, the people having deserted the dwelling. Certainly there should be no lack of disinfectants at Hebburn, as the very atmosphere is redolent of chloride of lime, and some of the most extensive chemical manufactories in the kingdom are in its neighbourhood. The district has, I understand, become very much overcrowded of late, consequent upon the great extension of iron ship-building.

Newcastle-on-Tyne, September 12th, 1874.

BEQUESTS &c. TO MEDICAL CHARITIES.—Mr. William J. Hutchison, of Newcastle-on-Tyne, has bequeathed £25,000 to the Infirmary, £10,000 to the Dispensary, £500 to the Hospital for Children, £500 to the Indigent Sick Society, and £500 to the Eye Infirmary, all at Newcastle; £2000 to the Prudhoe Convalescent Home, Whitby, and £150 to the Ingham Infirmary, North Shields. Sir Edmund Beckett, Bart., of Doncaster, has bequeathed £1000 to the General Infirmary, Leeds, and £250 to the Doncaster Infirmary. The Great Northern Hospital has received £500, and the York County Hospital £300, under the will of Miss Hannah Brackenbury. The executors of the same lady have contributed £200 out of the sums at their disposal in aid of the National Hospital for Consumption, Ventnor. Mr. David Kidd, of Mark-lane and Camberwell-road, has bequeathed £500 to the Royal Infirmary, Edinburgh. The Rev. Thomas Warren, of Alcester, has bequeathed £300 to the Children's Hospital, Birmingham. The Royal United Hospital, Bath, has become entitled to £300 under the will of Mrs. Sills Gibbons. The Eastern Counties Asylum for Idiots, Colchester, has received £100 under the will of Mr. Edward Daniell, of Winchester.

Obituary.

FRANCIS EDMUND ANSTIE, M.D., F.R.C.P.

THE lamented death of Dr. Anstie is a matter of far more than merely professional interest and concern. Of the void which it creates, and of the lessons which it teaches, we shall have to speak elsewhere; and in this place we do but put on record some fragments of his personal history, which may assist in rendering more vivid the recollections of his many friends.

Francis Edmund Anstie was born at Devizes on the 11th of December, 1833. He was the second son of a manufacturer in easy circumstances; and his family had been established in the locality for several generations. From this, and from their personal qualities, it came about that his father held an almost patriarchal position over his people, and employed many whose ancestors had worked for his own for more than a century. The eldest son was designed to carry on the good traditions of the house; and Francis, after being educated at a private school in Devizes, which he left in 1849, was articled in the following year to his cousin, Mr. Thomas Anstie, a medical practitioner of the town. According to the custom of those days, he remained with his cousin three years; and entered at King's College in 1853. He passed through the ordinary medical curriculum with credit, and gained the Gill Prize for general proficiency at the end of his first winter session. He was a steady worker, both at the College and in the hospital, where he was an enthusiastic disciple of Dr. Todd, under whom he served as clinical clerk, and whose teaching gave a manifest colour to his whole professional life. In 1857, being as yet undecided with regard to his future line of practice, he took the post of resident physician-accoucheur's assistant in the hospital, where his kindly and genial disposition endeared him to his fellow residents, Dr. A. Meadows and Mr. Christopher Heath, and his fine voice contributed not a little to the attractions of the musical evenings which many of the old students will so well remember. In the autumn of the same year he took his M.B. degree at the University of London, and was for some time occupied in administering chloroform for Sir W. Fergusson. After this he lived for a short time in Stamford-street; but in 1859 he removed to Onslow-square, and was appointed physician to the Chelsea Dispensary. By this time he had determined to practise medicine; and having been appointed pathologist to the Westminster Hospital, he was elected assistant-physician and co-lecturer on Forensic Medicine in 1860, in the vacancy caused by the transference of Dr. Russell Reynolds to University College. He subsequently exchanged his lectureship for that on Materia Medica, which he held for many years, his course being devoted rather to the therapeutic action of drugs than to matters of mere detail. At this time his house in Onslow-square was the place of meeting of a circle of friends, who came together on Saturday evenings for talk and music, and who aimed at a high standard of artistic, literary, and scientific conversation, in which Dr. Anstie was not only well qualified to take a prominent part, but also, by his frank and genial temperament, to form a bond of union between his associates. In 1862 he married, and from thence forward devoted himself far more closely than before to the practical business of his calling, displaying a power of steady and sustained work that had previously lain in abeyance, and that rapidly brought him into the front rank of his contemporaries. In 1863 he removed to the house in Wimpole-street, in which the rest of his life was spent, and in the following year published his well-known work on Stimulants and Narcotics, chiefly the result of experimental research conducted at the Westminster Hospital. His tenure of office as assistant-physician was prolonged for thirteen years, during which he applied himself to the work of the out-patient department with an energy and solicitude that never flagged. About a year ago he succeeded to the post of physician, and was enabled to give full scope in the wards to those powers of clinical teaching which his long work among out-patients had cultivated to the utmost. For a short time he shared the lectureship on Medicine with Dr. Basham, but had lately given the full course in a manner which elicited the warm admiration of those who heard him. Besides his appointments at the Westminster Hospital, he was physician to the Belgrave Hospital for Children, and consulting physician to the Royal South London Ophthalmic Hospital. It need no longer be a secret that the most flattering overtures were made to him from New York, to settle there as a hospital physician and consultant, and a lecturer on the principles and practice of physic; but family reasons, and the feeling of growing success in England, prevented him from assenting to a proposal which was none the less gratifying that it came from those who knew him only by his professional reputation. His last work, and that on which his future fame will chiefly rest, was his admirable treatise on Neuralgia, on a second edition of which he was engaged at the time of his decease.

Besides his books, Dr. Anstie was a frequent writer of more fugitive literature. He contributed occasional articles on scientific subjects to various non-medical papers, and was for years a member of the editorial staff of this journal. In that capacity he was the chief member of THE LANCET Commission to inquire into the state of workhouses, and took a principal part in conducting the inquiries and in writing the reports. In July, 1869, he became sole editor of the *Practitioner*, which during the first year of its existence he had edited in conjunction with Dr. Lawson, and which has ever since been indebted for its high position to his sound judgment, his constant industry, and his ready pen.

Dr. Anstie became a Fellow of the College of Physicians in 1865, and was soon recognised as a power in that venerable institution, where his voice was raised in support of every proposal which was calculated to increase the dignity or to extend the usefulness of the College. He was much interested in the recent improvements in the manner of electing Fellows, as well as in the negotiations for the conjoint scheme of examination; and he was the prime mover of the petition to the Premier on the subject of the overcrowded dwellings of the poor. In two directions, therefore, in the reform of workhouses and in the limitation of the power of railways to sweep away needful habitations, his efforts led immediately to legislation for the public good.

The circumstances of his death will form part of the history of the profession. The schools of the Patriotic Fund at Wandsworth had been visited by a somewhat strange succession of illnesses, and at last some of the children were attacked by a rapidly fatal form of peritonitis. Dr. Anstie was called in to the assistance of the medical officer, and he made a careful examination both of the premises, and of the patients. He was at the time suffering from overwork and want of rest, and was perhaps hardly in a state to undertake the oftentimes dangerous duty of a medico-sanitary inspection; but, after accomplishing it, he made, on Sunday, the 6th, a post-mortem examination of one of the children who had died from peritonitis. Whilst thus engaged the middle finger of his right hand was accidentally punctured by a needle. He sucked and washed the wound immediately, and on Tuesday mentioned the occurrence to some of his friends, but expressed a hope that no harm would result from it. On Wednesday he felt ill, and complained of pain in the right armpit. During the afternoon he was so chilly that he sat before a fire wearing an overcoat. Dining with a friend in the evening, he spoke of having poisoned his hand, and said that he had so much pain in the armpit that he feared he should have an abscess there. The pain in the arm made it impossible for him to put on or take off his great coat without assistance. He still complained of feeling cold, and appeared to be depressed in spirits. On Thursday he was confined to his bed, and Mr. Brudenell Carter found him with a dry tongue, a dry, hot skin, and complaining of distressing headache, and of much pain over the right pectoral region. During the day the symptoms increased in intensity, and in the evening Mr. Carter wrote to Mrs. Anstie, who was in the country with her children, asking her to return home early in the morning. After a restless night the patient was still worse on Friday, and the assistance of Dr. George Johnson was obtained, who has

favoured us with a narrative, which we give in his own words:—

"I first saw Dr. Anstie with Mr. Brudenell Carter at 3 P.M. on Friday, the 11th inst. He was then delirious and quite unable to give a history of his illness. The tongue was dry; the temperature 105°; there was an erysipelatous blush about the size of the palm of the hand over the right pectoral muscle; there was excessive tenderness on pressure in the right axilla and over the front of the chest on the right side; the slightest movement of the arm elicited a cry of pain; there was no appearance of inflammation about the wound on the hand or up the arm. At half-past nine in the evening I again saw the patient, in consultation with Dr. Burdon Sanderson and Mr. Carter. His condition remained unchanged. At half-past nine on Saturday morning I again met Mr. Carter. We found the breathing was very rapid; there was a distinct friction-sound over the middle and lower lobe of the right lung, and dulness on percussion over the same space; the erysipelatous redness and the tenderness on pressure remained the same. The urine was highly albuminous, and contained numerous epithelial casts. About the middle of the day symptoms of a blood-clot at the right side of the heart came on; the features were livid; the breathing rapid and shallow; consciousness was rapidly lost, and death occurred at half-past 2 P.M.

"It was not thought necessary or desirable to make a post-mortem examination. The nature of the disease was obvious. A poison absorbed from the wound of the hand had caused diffuse cellulitis over the right side of the chest, acute pleuro-pneumonia, and general blood-poisoning. I may add that Dr. Sanderson entirely concurs with me in the opinion which I have here expressed as to the origin and nature of Dr. Anstie's illness."

To the history thus told there is nothing to add. It remains only that we should endeavour, for the benefit of those to whom he was not known, to sketch in some faint and imperfect outline the personal character of the departed. Dr. Anstie combined with his versatile and unflagging industry a singularly affectionate and enthusiastic temperament, and a kindness of heart that never varied. He had no enemies but those whose enmity was a tribute to his worth. He had more and more warmly attached friends than fall to the lot of any but the very few. Among those who followed him to his grave on Wednesday there must have been some forty or fifty who had been his fellow-students, and whose cordial intimacy with him had stood the test of one-and-twenty years. It was well said of him by *The Times* that "his hatred of oppression or wrong-doing, his love of truth for its own sake, his generous and chivalrous character, had endeared him to all who were brought within the range of his personal influence. Of a warm heart and a somewhat combative temperament, he was engaged in many controversies, but he never suffered his share in them to degenerate into personality, and never forgot to distinguish between the abuses he condemned and the possibly innocent persons who administered them." He was, indeed, "*sans peur et sans reproche.*" By those who were so long associated with him on this journal he will be deeply and sincerely mourned, and more deeply still, but not more sincerely, by the widow and three children upon whose grief we cannot venture to intrude. But a few days before his fatal illness he walked with Mrs. Anstie past the little churchyard of Friern Barnet, and, observing the peacefulness and beauty of the spot, remarked that it would be good to rest there. The half wish implied in his words has been respected, and at Friern Barnet his mortal remains have been deposited. The history of the school illnesses shows that he was, although indirectly, a victim of the popular indifference to sanitary matters, and it is necessary to borrow largely of his own charity in order to forgive the mismanagement which laid him low.

EDWARD CUTLER, F.R.C.S.

MR. CUTLER, who died on Sept. 7th, aged seventy-seven, was the son of a clergyman. At an early age he entered the Navy, but his health not being considered sufficiently robust for that profession, he took to Medicine, and studied in the schools of Great Windmill-street and St. George's Hospital. He became a Member of the College of Surgeons in 1820, a Fellow in 1843, and was elected a member of the Council at the first election under the new charter in 1844, when a candidate was proposed and seconded by two Fellows present on the day of election, and if at the ballot it proved that he had a majority of votes in his favour he was declared elected; if the majority of those present had voted against him, he was passed over. Mr. Cutler did not remain long in the Council, having subsequently resigned. Shortly after he became a Member of the College he was appointed assistant-surgeon in the Life Guards, which office he held but for a short time. Subsequently he assisted Sir Benjamin Brodie in his private practice. In 1834 he was elected assistant-surgeon to St. George's Hospital, and in 1843 he was elected surgeon, when he resigned the office of surgeon to the Lock Hospital, which he had held for many years. In 1861 he resigned the office of surgeon to St. George's, when he was appointed consulting surgeon to that hospital. Few surgeons performed their hospital duties more faithfully or more efficiently than he. During the whole time he was attached to St. George's he was never absent for a longer period than a week except on one occasion, and then on account of ill-health. He was a very dexterous and successful operator, never having lost a case of lithotomy. He could use the knife with the left hand equally well as with the right. In performing some operations he had few equals. In private practice he was very successful, and for many years enjoyed a very large practice. His connexion with the Life Guards brought him in contact with the household brigade, infantry as well as cavalry. He was very popular with the army in general, and much esteemed by many holding high official appointments. His large acquaintance with "the upper ten thousand" in London placed at his disposal many medical appointments, and the pupils of St. George's were indebted to no one more than to him for their first start in professional life in travelling appointments and for his recommendation when they commenced practice. He never lectured, never spoke at medical societies, never wrote on professional subjects, yet obtained a practice and an influence over such a number of people of importance as few of his *confrères* could boast of—an example showing that the vicious system of advertising medical works, resorted to by many, is not necessary for professional success.

His connexion with the Lock Hospital brought upon him a special practice as large as any since Mr. John Pearson's time, though he did not seek it. He scarcely ever left London, except professionally, but occasionally for a couple of days' shooting in some great preserve. The older pupils of St. George's may recollect him formerly occasionally visiting a patient in the hospital early in the morning, an overcoat covering "the pink," previous to a run with the royal staghounds, as Sir Philip Crampton might have been seen in Dublin in bygone days.

Mr. Cutler practised his profession assiduously, honourably, and very successfully both in regard to himself and his patients. What can be desired more? He leaves behind him a character unsullied by any unprofessional or unworthy act. He was ever ready to help a professional brother in trouble or difficulty; his memory will be long cherished, not only by his professional friends, but also by many who knew him first as patients and ultimately became fast friends. Mr. Cutler married a daughter of Sir Thomas Plumer, sometime Master of the Rolls, who survives him, with a son, a Chancery barrister, and a daughter.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Sept. 10th:—

Crétin, Eugène, St. Bartholomew's Hospital.
Fox, Richard Hingston, Stoke Newington.
Higgs, Augustus William, Marylebone-road.
Vance, Arthur Bayly, Carr's-lane, Birmingham.
Wright, John Sydney Albert, Horsham.

The following gentleman passed the Primary Professional Examination on the same day:—

Howard, Edwin, St. George's Hospital.

THE library of the Royal Medical and Chirurgical Society was reopened on Thursday, the 10th inst.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.—The first meeting of this Society for the session 1874-75 was held in the Faculty Hall on the 4th inst. The following office-bearers were chosen for the session:—President: Dr. James Morton. Vice-Presidents: Mr. John Reid, Dr. D. Richmond. Council: Dr. George Miller, Dr. T. D. Buchanan, Dr. R. Stewart (Coatbridge), Dr. James Scanlan, Dr. Alex. Patterson, Dr. James Dunlop, Dr. D. Taylor (Paisley), Dr. Robert Perry. Secretaries: Dr. Joseph Coats, Dr. Gavin P. Tennant. Treasurer: Dr. Hugh Thomson.

SOUTH DURHAM AND CLEVELAND MEDICAL SOCIETY.—The annual meeting of this Society was held in the North Riding Infirmary, Middlesborough, on the 9th inst., when the following gentlemen were elected office-bearers for the ensuing year:—President: Dr. J. W. Eastwood. Vice-Presidents: Dr. R. Smith, Mr. Chas. Trotter. Hon. Secretaries: Dr. Ellerton, Dr. Foss. Committee: Mr. Farquharson, Dr. Fothergill, Mr. Hedley, Mr. Hind, Mr. E. Jackson, Mr. J. Laudler, Mr. D. C. G. Odlum, Dr. Pearson, Mr. Sleightholme.

Medical Appointments.

ALLARDYCE, J., M.B., C.M., has been appointed Resident Assistant Medical Officer to the Female Department of the Durham County Asylum.

BISHOP, S. O., M.R.C.S.E., L.R.C.P.Ed., has been appointed Resident Assistant Medical Officer to the Male Department of the Durham County Asylum.

BRAMWELL, B., M.D.Ed., has been appointed Physician to the Newcastle-on-Tyne Infirmary, vice Charlton, deceased.

BRAMWELL, J. W., M.B., L.R.C.S.Ed., has been appointed Medical Officer to the Workhouse and the Tynemouth District of the Tynemouth Union.

CATTELL-JONES, T., M.R.C.S.E., has been appointed Medical Officer for the newly-formed Shepperton District of the Staines Union.

CLARKSON, J. W., M.R.C.S.E., L.R.C.P.L., has been appointed House-Physician to St. Thomas's Hospital.

CORMACK, J. C., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Assistant-Surgeon to the 12th Lancashire Artillery Volunteers.

DAVIDSON, C., M.R.C.S., L.A.S., has been appointed Surgeon to the Newcastle and Gateshead Provident Medical Society.

DAVIES, H. W., M.R.C.S.E., has been appointed Resident House-Surgeon and Registrar to the Cancer Hospital, Brompton, vice Crombie, resigned.

DEARSLEY, H. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Hoxne District of the Hoxne Union, Suffolk, vice Packard, resigned.

ELLIFFORD, G. S., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Samford Rural Sanitary District: £36 per annum; acreage 44,647; population 12,369.

EWART, J., M.R.C.S.E., has been appointed Medical Officer to the Accrington and District Dispensary.

FIELD, E., M.R.C.S.E., L.R.C.P.L., has been appointed Second Clinical Assistant at St. Luke's Hospital.

GARNER, J. E., M.B., C.M., has been appointed Senior House-Surgeon to the Preston and County of Lancaster Royal Infirmary and Dispensary, Preston, vice Blair, resigned.

GEMMELL, S., M.B. Univ. Glas., has been appointed Assistant to the Professor of the Practice of Medicine at the University of Glasgow, vice A. Wood Smith, M.D., appointed Professor of the Practice of Medicine at Anderson's University.

GUTHRIE, G., M.B., C.M. Ed., has been appointed Assistant Medical Officer to the County Asylum, Burntwood, Lichfield, Staffordshire.

HEWARD, J. M., M.R.C.S., L.S.A., has been appointed Medical Officer to the Stamford Urban Sanitary District: £30 per annum; population 8000.

ILIFFE, C. W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of Health for the Coventry Rural Sanitary District: £25 for one year.

IRVING, C., M.R.C.S.E., has been appointed House-Surgeon to the Great Northern Hospital, vice Young.

JAMES, D. P., M.R.C.S.E., has been appointed Surgeon to the Reefton District Hospital and Gaol, Province of Nelson, New Zealand.

JOHNSTON, R., M.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer to the Birmingham General Provident and Benevolent Institution, also to the Birmingham District of the Midland Railway Friendly Society, vice Meeke, deceased.

KERR, A. D., M.B., C.M., has been appointed Parochial Medical Officer and Public Vaccinator for Westray and Papa Westray, Orkney, vice Macpherson, resigned.

KINGSFORD, P., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the newly-arranged Sunbury District of the Staines Union.

MASON, S. B., L.R.C.P.Ed., L.F.P. & S. Glas., L.S.A.L., L.M.Ed. & Glas., has been appointed Surgeon to the Tranch Colliery, Pontypool, Mon.

MAUNSELL, J., M.D. Qu. Univ. Irel., L.R.C.S.Ed., has been appointed Assistant House-Surgeon to the Liverpool East Dispensary, vice Beckless, resigned.

MAYOR, W. S., M.R.C.S.E., L.R.C.P.L., has been appointed House-Physician to St. Thomas's Hospital.

MILLIGAN, W., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been re-elected Medical Officer for the Brassington District of the Ashbourn Union, Derbyshire.

RAYNER, R., M.R.C.S.E., L.S.A.L., has been re-appointed Medical Officer of Health for the Drighlington Urban Sanitary District.

REDWOOD, T. H., M.D., has been appointed Medical Officer of Health for the Rhymney Urban Sanitary District.

SAER, D. P., L.R.C.P. & L.R.C.S.Ed., L.S.A.L., has been appointed Medical Officer of Health for the Pembroke Rural Sanitary District: £25 per annum; acreage 55,298; population 11,549.

SCHOLES, R. B., M.B., C.M. Ed., has been appointed Assistant House-Surgeon to the Stockport Infirmary.

SMITH, W., L.R.C.P.Ed., has been appointed Junior House-Surgeon to the Preston and County of Lancaster Royal Infirmary and Dispensary, Preston, vice Garner, appointed Senior.

SPEIRS, W., M.R.C.S.E., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Surgeon to the Cleator Iron Ore Mining Company and High House Mines, Cumberland, vice Power, resigned.

SYMONDS, C. P., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Ormskirk Rural Sanitary District: £46 per annum; acreage 24,728; population 7679. Also for the Latham Urban Sanitary District: £30 per annum; acreage 8094; population 3659.

WILSON, H. C., M.D. Qu. Univ. Irel., has been appointed additional Resident Surgeon at the Birmingham General Dispensary.

Births, Marriages, and Deaths.

BIRTHS.

ANDERSON.—On July 25th, at Yedo, Japan, the wife of William Anderson, F.R.C.S., of a son.

ASHBY.—On the 12th inst., at Vine House, Grantham, the wife of Alfred Ashby, M.B., F.R.C.S., of a son.

BEATSON.—On the 17th ult., at Sitabaldi Nagpur, Central India, the wife of Surgeon-Major W. B. Beatson, M.D., of a son.

CAROLAN.—On the 3rd inst., at Great Clacton, near Colchester, the wife of James F. Carolan, M.R.C.S. Eng., of a son.

ELLIS.—On the 9th inst., at Clarence-street, Gloucester, the wife of T. S. Ellis, M.R.C.S.E., of a daughter.

FARRINGTON.—On the 2nd inst., at Penshurst, the wife of W. H. Farrington, M.D., of a son.

KING.—On the 14th inst., at Harley-street, the wife of Dr. Robert King, of a son.

MILSON.—On the 8th inst., at Finchley-road, the wife of R. H. Milson, M.R.C.S.E., of a son.

OLLERHEAD.—On the 23rd ult., at Minehead, Somerset, the wife of I. J. Ollerhead, L.R.C.P., L.R.C.S.Ed., of a daughter.

SHEAF.—On the 5th inst., at Millfield House, Newcastle-on-Tyne, the wife of C. A. Ernest Sheaf, M.R.C.P., of a daughter.

MARRIAGES.

ALLWOOD—HARDERN.—On the 2nd inst., at St. James's Church, Sutton, Macclesfield, J. Philip Allwood, L.R.C.P.L., of Macclesfield, to Elizabeth Thorneycroft, only daughter of W. T. Hardern, M.R.C.S.E., of Wood Cottage, Sutton, Macclesfield.

DIXON—GURNEY.—On the 1st inst., at Lower Wimbledon Baptist Chapel, John Dixon, M.B., to Harriet Edith, daughter of the late Thomas Gurney, Esq.

EDIS—MURRAY.—On the 9th inst., at Belmont-street, Aberdeen, Arthur Wellesley Edis, M.D., of Wimpole-street, Cavendish-square, London, to Mary, youngest daughter of Andrew Murray, Esq.

MARSHALL—WARWICK.—On the 8th inst., at St. Jude's Church, Englefield-green, Surrey, John James Marshall, Esq., L.R.C.S.I. &c., of Lamberhurst, Kent, to Mary, eldest daughter of Benjamin Warwick, Esq., of Englefield-green.

MESSER—MAY.—On the 15th inst., at the Church of St. James the Great, Devonport, John Cockburn Messer, M.D., Staff-Surgeon R.N., H.M.S. *Implacable*, to Elizabeth, eldest daughter of Joseph May, F.R.C.S., J.P., of Nelson Villas, Devonport.

SMITH—DOWSON.—On the 10th inst., at St. Paul's Church, Clifton, Bristol, R. Shingleton Smith, M.D., of Eckeby House, Clifton, to Elise, only daughter of the late H. Cox Dowson, Esq., of Bayonne. (No cards.)

TAYLOR—WHITAKER.—On the 3rd inst., at St. John's Church, Mansfield, Notts, Dr. Herbert Owen Taylor (son of Henry Taylor, Esq., surgeon, of Nottingham), to Mary Anne Allcock, eldest daughter of the late Joseph Whitaker, Esq., formerly of Ramsdale House, Notts. (No cards.)

TOMLINS—EVETT.—On the 20th inst., at St. Michael's, Handsworth, James Tomlins, M.R.C.S.E., L.R.C.P.Ed., Newport, Shropshire (son of the Rev. R. Tomlins, of Manchester), to Julia, youngest daughter of James Evett, Esq., of the Elms, Handsworth.

WIGHT—TOD.—On the 3rd inst., at Edinburgh, John Wight, M.D., C.M., to Janet Don, daughter of the late William Tod, Esq.

WILCOX—GORING.—On the 3rd inst., at East Bradenham, Norfolk, Dr. William Wilcox, of North Walsham, late of Deal, to Emily, daughter of Charles Goring, Esq., of East Bradenham.

DEATHS.

BATES.—On the 9th inst., William Bates, M.D., of Stockport-road, Manchester, aged 55.

BOWDAGE.—On the 6th inst., Emanuel Bowdage, M.R.C.S. Eng., of Wivelliscombe, formerly of Crewkerne, aged 74.

CARTER.—On the 14th inst., at Wimpole-street, in his 11th year, after a lingering illness, Arthur Septimus Becher, the beloved son of Robert Brudenell Carter.

CASS.—On the 2nd inst., Edward E. Cass, M.R.C.S. Eng., L.S.A. Lond., of Goole, aged 31.

DONNALL.—On the 2nd inst., at Falmouth, Robert S. Donnall, surgeon, aged 85.

GORDON.—On the 8th inst., at Heath Cottage, Charlestown, Aberlour, George Gordon, L.R.C.S. Edin., Surgeon R.N.

HICKSON.—On the 6th inst., at Mersey-road, Rock Ferry, Robert Hickson, M.D., aged 82.

KING.—On the 12th inst., Daniel King, M.R.C.S. Eng., of Bideford, aged 28.

PAXTON.—On the 10th ult., on the homeward voyage from the Cape, William Albert Paxton, M.B., surgeon steamship *Adriatic*.

SCOTT.—On the 7th inst., Robert Thomas Scott, L.K.Q.C.P. Irel., L.R.C.S. Ed., of Kilbeggan, co. Westmeath, aged 42.

SIMPSON.—About the 13th June, at Footscray, Melbourne, Australia, William Simpson, M.R.C.S. Eng.

SMEATHMAN.—On the 2nd ult., George T. Smeathman, M.R.C.S. Eng., of Great Missenden, aged 54.

SOMERVILLE.—On the 12th inst., Samuel Somerville, M.D., of Hart-street, Edinburgh.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

A MODERN PYGMALION.

A REMARKABLE case of insanity is reported in the *Droit*, in a man named Justin, who died recently in the Bicêtre Asylum. Justin, it appears, had been an exhibitor of waxwork figures at Montrouge, and was so impressed by the beautiful proportions of the figure of a girl in his collection as ultimately to become deeply enamoured of it. He would spend hours in contemplating the inanimate object of his affection, and finally was seized by the illusion that it actually by movements of the features responded to his devotion. At last the wife of the crazy fellow, irritated at his neglect, in a fit of jealousy destroyed the figure, and as a result of the murderous attack on his wife with which Justin resented the demolition, he was secured and lodged in the Bicêtre, where he remained five years, living to the last under an overpowering sense of the charms of his lost image "Eliza."

Accidents.—A certifying factory surgeon's inquiries into an accident are restricted to discovering the nature of the injury received, the manner in which the accident occurred, and the time of its occurrence. He is not justified in unbandaging a limb set by another surgeon, and is not in the slightest degree concerned in the treatment of the case.

P. S.—We understand that there is no opening there at present.

TREATMENT OF FAVUS.

To the Editor of THE LANCET.

SIR,—In reply to the queries of Mr. Howley respecting the above disease, let me assure him that without some medicinal treatment he will never cure his patients. It is a tedious affection, requiring patience on the part of the person suffering, and great painstaking with the medical attendant; but the result will be successful. In the first place, examine some of the crusts under the microscope to ascertain if any mycelial threads or fungous elements of the Achorion Schönleinii can be detected. If so, then adopt the following plan:—Take a very small pair of scissors, which will detach a crust or scab and leave a raw exuding surface; cut all the hair close to the skin—there is no necessity to epilate, as advised by some. Having obtained one raw surface, make a determination to cure that spot; wash it clean with a lotion of carbonate of potash (one drachm to three ounces of rose water); then dry with a piece of lint, and paint it afterwards with the following solution—viz., nitrate of silver, one scruple; spirit of nitric ether, half an ounce. Now this is the plan which must be adopted:—Each day a fresh spot attacked and cured; and if a spot that has been treated on a former day exudes any moisture, paint again with the nitrate-of-silver solution. The child should wear a skull-cap of linen rag wet with the alkaline solution, covered with oil-silk during the day. Great cleanliness is necessary. Internally, good food, with liquor arsenicalis, and a purgative, such as calomel and jalapine, every other morning. Whilst administering the purgative, watch the secretions to see that they are healthy. Without it there is no utility in trying local treatment. Yours, &c.,

Hanley, Staffs, September, 1874. JOHN SWIFT WALKER, M.D.

To the Editor of THE LANCET.

SIR,—Having seen a good many cases of favus, I beg to inform Mr. Howley that if he will try the following I have no doubt it will quite fulfil his expectations:—Poultice twice a day with linseed-meal, having previously mixed it with the froth of porter (this will effectually remove the scabs in a few days); wash twice a day with an alkaline lotion; dry perfectly; then apply iodide-of-sulphur ointment twice daily, regulating the strength according to circumstances, and keeping the head covered with oil-silk. Internal treatment, if scrofulous, cod-liver oil; if not, give (Donovan's solution) liquor arsenicalis and hydriodate of mercury. Epilation I do not think is of any real benefit, as the disease does not originate from the hair-bulbs. I have seen it in two instances on the trunk. Cutting the hair very close is advisable and necessary. Give a sedlitz powder twice every week.

I am, Sir, yours truly,

Chart-Sutton, Sept. 7th, 1874. J. N. BREDIN, L.R.C.S.I., &c.

THE ARMENIAN TWINS.

L'Union Médicale of Sept. 5th states that a physician of Constantinople has published in the *Gaz. Méd. d'Orient* an account of twins (connected like the Siamese brothers), who in 744, according to Eastern chroniclers, came to Constantinople from Armenia. As their presence was considered of bad omen, they were expelled, but returned under Constantine VII. At the death of one of the twins the connecting band was divided, but the survivor died three days after the operation.

Mr. Manock (Liskeard) is desirous of learning Dr. Sydney Ringer's method of administering ipecacuanha spray in winter cough.

Student.—Apply to the Secretary.

Rusty.—The assistant is wrong. The practice of writing "recipe aquæ ad uncias sex," instead of "recipe aquam ad uncias sex," is common; but it is a gross grammatical blunder all the same.

H. D.—It would not be a bar if the applicant were in other respect qualified.

A PRECOCIOUS GIRL.

To the Editor of THE LANCET.

SIR,—Presuming the case to be sufficiently rare, I venture to inform you that I yesterday delivered a girl, thirteen years of age last month, of a fully developed female living child. The labour, from the time of complete dilatation of the os uteri to the birth of the placenta, occupied but one hour, and both the mother and child are at present doing well. As the result of strict inquiry, I have ascertained the girl only menstruated once previous to conception, and that only to a very slight degree.

Yours obediently,

Lewes, Sussex, Sept. 14th, 1874. J. G. BRADEN, M.R.C.S., &c.

THE BELFAST OPERATIVES.

THE members of the British Association who visited the various manufactories of Belfast last month in the pursuit of science or pleasure, had probably little idea of the effects produced by them upon the health of the population. The following graphic account was furnished to the Association of Certifying Medical Officers by Dr. Purdon, the certifying factory surgeon of the district:—

"The first stages of flax manufacture are the most unhealthy and fatal to life—hackling, sorting, those engaged at the machines, carding, preparing. In these processes a great quantity of dust is given off (called pouce), and, being constantly inhaled, very soon irritates the palate and thence down into the lungs. In a short time the worker becomes affected with cough and attacks of dyspnœa; for two hours each morning these attacks are so violent that he is obliged to seize hold of the table attached to the machine in order to enable him to get over the paroxysm more speedily. This attack is so well known that when one is seen labouring under it he is said to be "poucey." The machine boys are the first to feel the effects of flax dust. After being engaged for about four or six years, if not taken off by phthisis (for very many die of this complaint at eighteen years), they are made hacklers or sorters; and as they still continue to inhale the dust, their lungs become more and more engaged, so that they become quite old-looking at thirty years; the shoulders become high and chest altered; they generally die at forty-five years of phthisis, and if life is prolonged are compelled to give up work, so it is exceedingly rare to see a hackler 60 years of age. The carders are all females, suffer from the same disease that the hacklers labour under. If they get a carding machine at eighteen years, generally die at thirty years. Those engaged in the preparing of *long line* are very generally short-lived, and I have been informed that this branch is 'sure death.' Those that are engaged in the spinning room, especially the full and half-time doffers, are affected with a cutaneous eruption called lichen, which attacks the uncovered parts. The cause assigned for this affection is the flax water and steam from the spinning frames. The spinners, being all adults, do not suffer from it. The great majority of all new comers are attacked with a peculiar fever, called by the workers 'mill fever.' They very often faint, and are attacked with vertigo, caused by the heat and steam of the rooms (many accidents have occurred from this cause), œdema of the legs, varicose veins, ulcers. Those that are employed in iron shipbuilding become quite deaf, also those that attend beetling engines. Rheumatic affections are very common amongst the workers employed in bleach greens. The weavers are often affected with weak sight, caused by looking closely at the white webs. Tobacco spinners are on their first employment attacked with nausea and vertigo; this soon passes away, but they become sallow in a very short time. The bronze boys were formerly attacked with symptoms of poisoning, from using the vermilion and green dust; but since the 'Baker respirator' has been used they have not felt the same symptoms."

TUBERCULOSIS NOT INOCULABLE.

IN a late communication to the Academy of Sciences of Paris, M. Metzquer tried to upset Villemin's doctrine. For the last five years the author has made experiments (from seventy to eighty), under the direction of Prof. Feltz, of the Faculty of Nancy. He never succeeded in inducing pulmonary consumption in the inoculated animals. The results were capillary embolism, infarctus, vesicular pneumonia, &c., all of which lesions have (the author maintains) been confounded with tubercle. Tuberculosis may, however, be generated in animals (says M. Metzquer), without inoculation of tubercular matter, by rough treatment, bad food, and, strange to say, by inflicting a wound upon them.

Mr. Bentley (Sherborne) must consult a surgeon in his own neighbourhood. We never prescribe.

MEDICAL TEACHERS.

IN the list of Medical Teachers given in the Students' Number of THE LANCET last week, we omitted the name of Mr. T. H. Hanbury, 24, Old-square, Lincoln's-inn.

Mr. Handel Griffiths.—We never exchange.

Mr. F. G. Bennett.—The book shall receive the usual consideration.

CHANGE OF ADDRESS AND ERASURE FROM THE REGISTER.

To the Editor of THE LANCET.

SIR,—I was the other day appointed medical officer of health for this district (Camelford) by a large majority; but the Local Government Board, after confirming the appointment, now declines to sanction the thing through the representation of some person that my name was not on the Register, and therefore I was disqualified. I placed my name on the list on Feb. 8th, 1862, and I am named in the Medical Directory of 1873 as M.R.C.S. Eng. and L.S.A. Lond., Medical Officer Leavening district, Malton Union. I wrote to Dr. Hawkins, the Medical Registrar. He says my name has been erased for the reason of my address not being known, and it is only a twelve-month since I filled up the circular and sent it in. I left Yorkshire since then through my wife's serious illness, which she has been suffering from for some years, and because I travel about for a *short* time, and have no settled address, I am to be struck off the Register for no other irregularity whatever that I am aware of, if it may be so considered by the Medical Council. It is a very hard case after having been in *hard* practice over thirty-five years, and brought up to the profession by my father previously, and having held many public appointments at home and abroad—some time in Russia with some engineers, and in the Emigration service and other places; six years at Guy's, and a dresser under Luke at the London Hospital, without any stigma on my character. I am about to apply to the Medical Council of Education and Registration to have my name, if possible, reinstated, which Dr. Hawkins, the Registrar, says no doubt will be done. But what use will it be to me, having come here recently to reside? Will it wipe out the injustice of the thing? Are medical men aware that without a settled address one has no travelling ticket, but is a complete nonentity or travelling adventurer, which means in the eye of the public nothing more than a quack? If it is necessary to register yearly, the profession should be made aware of it by circular, even if a small fee be paid.

Your obedient servant,

August 20th, 1874. GEO. BUCKELL.

P.S.—My father would not register for years; he considered it an injustice. I would register twice a year if I knew it was necessary.

A CANINE SURGEON.

An interesting instance of sagacity has been recorded by a correspondent of the *Philadelphia Medical Times*. A large dog of the St. Bernard and Newfoundland breed, called "Carlo," had been brought up with a cat, and the two became great friends. The cat had the misfortune to swallow a needle and thread which had got mixed up with some minced-meat prepared for its food. The cat suffered intensely. The dog, after some apparent deliberation, fixed upon a spot in the cat's neck, and commenced to lick it, which operation it continued to perform very assiduously for the better part of two days, his feline friend aiding him by keeping its head on one side. All at once the dog got much excited, and was seen to be anxiously striving to catch something between its teeth. The animal succeeded at last, by a sudden jerk, in seizing the point of the needle, and drawing it out through the skin and fur; but it still hung by the thread, which was divided by the daughter of the dog's master. The dog subsequently, after greeting the return of its master's son, immediately went to the place where the needle and thread had been thrown. Dr. Benjamin Lee, who relates the circumstance, says that he has been at the pains to verify the facts, and to do himself the pleasure of shaking "Carlo's" paw, and giving him the salutation of a *confrère*.

Mr. B. Bernard.—1. Matthews, Portugal-street.—2. Millikin and Lawley, Strand.

C. F. H.—454, Charing-cross.

M.D. (India) will perceive that attention has been directed to the subject. Our correspondent's communication, having already appeared elsewhere, cannot be inserted in the pages of THE LANCET.

Dr. Foote (Rotherham) is thanked for his courtesy.

MORTALITY AFTER CHILDBIRTH.

To the Editor of THE LANCET.

SIR,—Unless your correspondent, "Obstetricus," obtains very extensive data, no true result as to childbirth mortality in private practice can be deduced. I will go further and say that unless the data obtained shall include the experience of those who have had to deplore the outbreak of puerperal fever, or who practise in the poorest districts, no reliable result can be obtained.

From November, 1866, to the present time, excluding the year 1869, of which I have lost the record, but which was a favourable one, I have attended 942 cases, and there have been 11 deaths. Of these the brief enumeration and the order in which they occurred are as follows:—

1. Forceps in a primipara. Phlegmasia and hectic. Death in 28 days.
2. Confluent variola in a primipara. Death in 8 days.
3. Peritonitis in a multipara. Death on the 2nd day. Called to this case by the midwife in attendance, who had allowed the poor woman to linger too long. On my arrival collapse had commenced.
4. Phthisis in a multipara. Death on the 16th day.
5. Phlegmasia, both legs. Death by syncope on the 7th day. Embolism.
6. Scarlatina sine eruptione, anasarca, casts in urine, in a primipara. Death on the 27th day. Diagnosis verified by another case occurring in the same household.
7. Puerperal fever, pneumonia, in a young woman. Death on the 10th day.
8. Puerperal fever, peritonitis, in a multipara. Death on the 8th day.
9. Puerperal fever, peritonitis, in a multipara. Death on the 6th day.
10. Scarlatina with profuse rash, in a primipara. Death on the 5th day.
11. Post-partum hæmorrhage in a young woman with a contracted pelvis. Forceps had been used to deliver in this her second labour.

Yours obediently,
Stoke Newington-green, Sept. 4th, 1874. GEO. J. B. STEVENS.

To the Editor of THE LANCET.

SIR,—I enclose for "Obstetricus" the accompanying notes, which perhaps may be of interest to him. They include all the cases which have occurred in my father's practice since August 29th, 1860, and also the result of my own cases, which are but few as yet. I regret that my father's notes of cases prior to 1860, which were over 3000 in number, have been lost, so that I cannot mention them with authority. I shall be happy to give "Obstetricus" any details if he should wish them, if he will do me the favour of writing to me privately, for which purpose I enclose my card, or through your columns.

Number of cases attended from August 29th, 1860, to December 25th, 1864, 511. Number of deaths in same period, 6—viz., shock, 1; hysteritis, 1; puerperal peritonitis, 4.

Number of cases attended from January 1st, 1865, to August, 1874, 625. Number of deaths in same period, 4—viz., typhoid fever at time, 1; pyæmia, 1; craniotomy, 1; puerperal peritonitis, 1.

Number of cases from October 1st, 1871, to September 1874, 208. Number of deaths, 1, puerperal peritonitis.

Yours faithfully,
Dover, Sept. 5th, 1874. C. W.

Medical Officer of Health.—There is no law prohibiting a district medical officer being elected a medical officer of health. The Local Government Board has approved of such election in some places, and disapproved in others. The Board disapproves, as a general rule, of a district medical officer holding the appointment, but gives its approval or disapproval according to the circumstances of each case. Our correspondent does not say whether he has been elected and re-elected by an urban or by a rural sanitary authority, or whether his is a case in which the Local Government Board would interfere at all. For if he has been elected by an urban sanitary authority, the Local Government Board would be called upon to approve or disapprove only in case of part of his salary being paid out of State funds. If elected by a rural sanitary authority (a Board of Guardians), no doubt the approval of the Board would be sought, whether the salary of the appointment were partly paid by the State or not. In either case it is exceedingly unlikely that our correspondent's sanitary authority would proceed to re-elect to an informal appointment, and that his appointment admits of such question as disturbs him.

Dr. Dowse's letter shall receive attention.

THE ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Rumour has it that Mr. Hardy is likely to consider the state the medical department of the army has been brought to by the late Warrant. Will you kindly allow me space for a few suggestions worthy of consideration, which, if adopted, would be to the advantage of the service and ourselves. I trust they may meet the eye of some of those interested in, and capable of influencing, the usefulness and welfare of the department. I shall not enter into any of the larger subjects, such as promotion, retirement, &c., as their importance is so fully recognised by all right-judging men that, doubtless, they will be well considered. I shall confine myself to three or four, and feel confident that any unprejudiced person cannot fail to consider them, not only most reasonable, but absolutely due to the officers of the department.

Firstly, then, every medical officer knows that his regimental hospital is daily visited by the subaltern of the day, who writes his name in a book, reporting that "all is correct." This in the spirit of the service means that the medical officers specially commissioned to treat the sick and look after the hospital are not to be trusted to do their duties without supervision, by sending the junior officers of a regiment, even sub-lieutenants on probation, to make this report, thereby placing the hospital, under charge of commissioned officers, on exactly the same footing as the regimental school, workshops, shoemakers' shop, &c., which are all under charge of non-commissioned officers. It is an unnecessary and degrading slight, and I know that it strikes the attention at once in this light of medical officers joining the service. We have never shown that such supervision is necessary, and surely all ends of discipline would be answered by an occasional visit from the commanding officer, or an officer deputed by him, senior to the medical officer in charge.

Secondly, I may safely assert that the practice of late of ordering medical officers to attend boards, instead of being members as formerly, is useless, and annoying to all, and a similar practice is not for a moment thought of in other army departments—such as Control, Engineer—in India (who are all civil), and others. It was supposed that this arrangement would save us trouble and be more agreeable; but those who conceived the idea must have known that the same trouble in a much more disagreeable way would result to us, and consequently now we may be called on to dance attendance on a board of junior officers. Moreover, it is plain that on the majority of occasions on which a medical officer is called on to give an opinion at these boards, he cannot give one that will do justice to Government and himself, though the board may be satisfied. In proof of this, let anyone take Dr. Parkes's work on Hygiene, and look up any chapter on Food, Drink, Clothing, &c.—these being the most frequent subjects on which a medical officer is called on to attend to give an opinion,—and he will at once see that a medical officer neither ought nor should be expected, except in peculiar circumstances, to give a hurried opinion, as on these boards he is expected to do. Even the shortest scheme of examination cannot be gone through there. The proper course would be to send a sample of whatever a medical opinion is required on to hospital for examination there by microscope or otherwise. The medical report given after this will be far more valuable and satisfactory to all parties. On the rare occasions that the presence of a medical officer is required, he should be a member of the board, as all other departmental officers are.

Thirdly. Many of the late regimental assistant-surgeons in India are still forced to continue full quarterly subscriptions to the mess and band of their former regiments, though much more than a year has elapsed since the date of the last Warrant; these in India, with mess guests &c., come to about 50 r., or £5 a quarter—a very high tax to have to pay to institutions in which they no longer have interest, and never had a position, unless one below the most junior combatant can be called a position. These subscriptions are sometimes enforced even when the surgeon is on detachment. That a medical officer attached to, and at the head quarters of, a regiment should (and I am sure few would object to) pay the quarterly subscription to the mess, for the use of mess property, servants, &c., is quite fair; but I cannot understand the justice of making him pay to the band, or to either, when away from head quarters on detachment. Some years' experience and close observation convince me that it is the enforced and unnecessary contact between military and medical officers which causes much of the discontent and frequent sense of wrong which medical officers often feel. There is a strong tendency amongst military men to place all medical officers below the most junior of themselves, as may be seen at messes, and from regimental circulars down to the Army List, where the medical officer is ever to be found placed last, no matter what his rank; and there is an equally strong feeling amongst medicos, based on their importance to the welfare of the army, their participation in the dangers and hardships of war, and their subjection to discipline, that they are entitled to more generous treatment. It is contrary to reason and human nature to expect educated men, and, as a rule, men coming from the same ranks in life as other officers, to accept, without just discontent, unnecessarily inferior position and annoyances such as I have mentioned. No medical officer of sense wishes to command; but they do wish to be considered intelligent, trustworthy officers, capable of performing the duties entrusted to them, and of looking after their own department, without the daily military supervision now thought necessary. The remedy is to separate us more; let us manage our hospitals, subject only to the officer commanding the station and the head of our department, and allow going to mess to be optional, as in all other departments. It is often said that a medical officer should look to his profession alone for position. He who does will look in vain, though, of course, he will be respected. But this is not all. A defined position, with adequate relative rank, is essential to all departments in the army, and the service could not go on without it; for no gentleman would enter a service without a certain rank, where rank holds so important a position. Mr. Hardy has now an opportunity of trying what a little generous consideration will do, and if he will, for once, he will find what a successful experiment it will be. The department has been so unused to anything of the kind that success is sure to follow.

In conclusion, I may say that as systematic study is expected of us (rightly), and is most essential, it behoves those who have now the power and opportunity to remove the causes which too often unfit our minds for such, by removing many of the abuses existing in the service and only retained by long usage and precedent, but which now hinder much good to the service, and keep a large department in a state of discontent.

I am, Sir, yours obediently,
July 8th, 1874. HOPE DEFERRED.

ACCIDENTAL NEPHROTOMY.

THE *Wiener Med. Woch.* states that a man of twenty-five, having been stabbed in the left renal region, a fleshy tumour was extruded through the wound by the act of coughing. This was found to be the kidney, which was eventually removed after a double ligature had been applied to the pedicle. The man did well.

R. W.—The fat man would live longest.

TREATMENT OF SYPHILITIC STOMATITIS.

To the Editor of THE LANCET.

SIR,—In answer to the question of "J. B. B.," I have no doubt that the condition under which his patient is labouring can be rapidly cured by the use of the mercurial vapour bath, especially if the fumes are applied locally as well as generally. If he will forward me his address, I shall be glad to furnish him with the fullest particulars as to this mode of treatment.

Yours faithfully,

JOHN ST. S. WILDERS.

4, Great Charles-street, Birmingham, Sept. 1874.

Dr. Struthers is thanked.

ERRATUM.—In Dr. Richardson's paper in our impression of September 5th, on "Diabetes from Carbonic Oxide," line 16, col. 2, p. 340, for "*arterial* blood was the same," read "*venous* blood was the same."

COMMUNICATIONS, LETTERS, &c., have been received from — Prof. Acland; Dr. C. J. B. Williams; Dr. Struthers, Aberdeen; Dr. Cobbold, London; Mr. Douglas, Bangor; Dr. Blanc, Paris; Dr. Richardson, Eastbourne; Dr. Baldock, Machynlleth; Mr. Tandy, Birkenhead; Dr. Cooke, Sheffield; Mr. Hunter, Aberdeen; Mr. Morrell, Stratford; Dr. Dowse, Highgate; Mr. Wheeler, Manchester; Mr. Hanbury, London; Mr. Kirby, Halifax; Dr. Coleman, Surbiton; Mr. Grayston, York; Mr. Cresswell, Dowlais; Mr. Palmer, Nayland; Messrs. Sturges and Co., York; Madame Healding, Hounslow; Mr. D'Orsey, London; Mr. Driver, Lutterworth; Mr. Garner, Preston; Mr. Jones, Bristol; Mr. Tilton, Stonehouse; Mr. B. White, Twickenham; Rev. Dr. Haughton, Dublin; Dr. A. B. Shepherd, London; Dr. Dick, Nunhead; Mr. Unsworth, Liverpool; Mr. Shand, Aberdeen; Mr. Stevens, Stoke Newington; Dr. Foulkes, Patterdale; Mr. Bernard, Newcastle; Mr. Warren, Cairo; Mr. Luxton, Tavistock; Dr. Jay, Scarborough; Mr. Budgett; Mr. W. W. Smyth, London; Mr. Mayor, London; Mr. Malcolm, Carlisle; Mr. Greenfield, London; Mr. Mason, Pontypool; Dr. Foss; Mr. Williams, Denbigh; Mr. Reeves, London; Mr. Guthrie; Mr. Day, Brightwell; Mr. Penhall, St. Leonards; Mr. Cormack, Liverpool; Mr. Bennett, Brighton; Mr. Molony, Ennis; Mr. Stocker, Risely; Mr. Patchett, Oldham; Mr. Burdett; Dr. Daly, London; Dr. Medlicott; Dr. Foote, Rotherham; Mr. Robinson, London; Mr. M. Baker, London; Mr. Jolliffe Tufnell, Dublin; Dr. A. Meadows, London; Mr. Heward; Mr. Morton, London; Mr. Benson, London; Dr. Swift Walker, Hanley; Dr. Brunton, London; Mr. R. Macnamara, Dublin; Mr. East, Newcastle; Mr. Tomes; Mr. Lomas, London; Dr. Fenwick, London; Dr. Dickinson, London; Dr. Prall, West Malling; Mr. Jeaffreson, Newcastle; Medicus; Sedative; Rusty; The Secretary of the West London Hospital; L.M.; One would be glad to see it; Erin; C. W.; &c. &c.

LETTERS, each *with enclosure*, are also acknowledged from — Mr. Hearn, Mangotsfield; Mr. Sutton, Sittingbourne; Messrs. Garnham, Wednesbury; Dr. March, Rochdale; Mr. Wey, Plymouth; Mr. Jameson, St. Helens; Mr. Istance, Risca; Mr. Morris, Frampton-on-Severn; Mr. Sugden, Bristol; Mr. Jones, Conway; Mr. Pollard, Oldham; Mr. Stonehouse, Horsforth; Mr. Evans, Towcester; Mr. Adams, Ipswich; Mr. B. Taylor, London; Mr. Griffiths, Dowlais; Messrs. Maclachlan and Co., Edinburgh; Mr. Moore, Petersfield; Mr. Walker, Kilburn; Mr. Wintle, Wandsworth; Dr. Ball, Blaenavon; Mr. Terr, Stourbridge; Mr. Bramhall, Ross; Mr. Lewis, Louth; Mr. Vines, Reading; Dr. Jackson, Broadstairs; Dr. Davidson, Carlisle; Mr. Tinsley, Burslem; Mr. Barlow, Dalston; Mr. Richards, Heckmondwike; Dr. Higgins, Louth; Mr. Eastwood, Blackburn; Mr. Hawkes, Paignton; Mr. Corns, Oldham; Mr. M'Clure, Twerton; Mr. Somerville, Edinburgh; Mr. Ellis, Morley; Mr. Hollings, Chatham; Mr. Evans, Worcester; Messrs. Craven and Sunderland, Huddersfield; Mr. Hands, Kilburn; Mr. Copestake, Brailsford; Mr. Jenkins, Bridgend; Dr. Ollerhead, Minehead; Mr. Stenhouse, Glasgow; Mr. Hunt, Belford; Dr. Sharman, Shrewsbury; Dr. Clegg, Bacup; Mr. Redmond, Kilham; Mr. Howard, Buckenham; Dr. Bailey, Witham; Dr, Woodward, Birmingham; Dr. Tomlin, Newport; Dr. Gill, Brighton; Mr. Plumer, Penrith; Mr. Head, East Grinstead; Mr. Willoughby, London; Mr. Gill, Sheffield; Mr. Megginson, Swinton; Mr. Philpot, Norbiton; Mr. Staff, Wadebridge; Mr. Hall, Manchester; Mr. Temple, Kington; Mr. Hanson, Presteign; Mr. Watson, Dorking; Mr. Holman, Hothly; Mr. Young, Bridgwater; Mr. Lyddon, Chatham; Mr. Allard, Tewkesbury; Mr. Payne, Sheffield; Mr. Simpson, Fence Houses; Mr. Garnham, Ripley; Mr. Jones, Pontypool; Mr. Sleeman, Corsham; Mr. Griffith, Harling; Mr. Leeming, Kendal; Mr. Dowse, Manchester; Mr. Sharp, Walsall; Mr. Henderson, London; Mr. Porteous, Glasgow; Dr. Cook, Manuingtree; Mr. Sharman, Norwood; Mr. Everett, Hornsey; Mr. Roberts, Notting-hill; Mr. Lloyd, Bromsgrove; Dr. Iles, Fairford; Dr. Nankivell, Chatham; Dr. Harrison, Haslingden; Mr. Harper, Holbeach; Mr. Wallis, Cambridge; Dr. Peart, North Shields; G., Rugby; Chirurgicus, Peterborough.

Newcastle Daily Chronicle, Sunday Times, Welshman, Cork Constitution, Lynn Advertiser, Manchester Examiner, East London Observer, Kensington News, Huddersfield Daily Chronicle, Surrey Advertiser, Isle of Man Times, Buxton Advertiser, Malta Times, Linco'nshire Chronicle, Liverpool Post, and *Worcestershire Chronicle* have been received.

METEOROLOGICAL READINGS

(*Taken by Steward's Instruments*).

THE LANCET OFFICE, SEPT. 17TH, 1874.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 9 A.M.
Sept. 11	29·84	W.	53	55	70	65	47	0·05	Raining
„ 12	29·68	W.	55	59	98	66	50	0·25	Cloudy
„ 14	30·42	S.E.	52	55	102	68	47	...	Overcast
„ 15	30·24	S.W.	54	57	99	69	47	...	Cloudy
„ 16	30·08	W.	56	59	87	68	50	...	Fine
„ 17	29·98	N.W.	51	53	...	...	49	...	Overcast

Medical Diary for the ensuing Week.

Monday, Sept. 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Sept. 22.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Sept. 23.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Thursday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 3½ P.M.

Thursday, Sept. 24.

ST. GEORGE'S HOSPITAL.—Operations 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Sept. 25.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Sept. 26.

HOSPITAL FOR WOMEN Soho-square.—Operations, 9½ A.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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